# PHYSICAL AND CHEMICAL DATA SUMMARY FOR TWELVE SELECTED LAKES IN THE MUSKOKA–HALIBURTON AREA (1981–1983)

R.A.Reid, B.A.Locke, R.E.Girard and A.C.Nicolls

DATA REPORT DR 84/1

86-04609/

DATA REPORT SERIES

The data presented in this report were collected by staff of the Water Resources Branch of the Ontario Ministry of the Environment as part of the Lakeshore Capacity Study or the Acid Precipitation in Ontario Study. This unreviewed report does not necessarily reflect the views or opinions of the Ontario Ministry of the Environment.

# Physical and Chemical Data Summary

# for

# Twelve Selected Lakes in the Muskoka/Haliburton Area

# (1981 - 1983)

R.A. Reid, B.A. Locke, R.E. Girard and A.C. Nicolls
Aquatic and Terrestrial Ecosystems Section
Water Resources Branch
Ontario Ministry of the Environment
Dorset Research Centre
P.O. Box 39
DORSET, Ontario
POA 1EO

# PREFACE

The unpublished Data Report Series is intended as a readily available source of basic data collected for lakes and watersheds in the Muskoka-Haliburton area of Ontario. These data were collected as part of the Lakeshore Capacity Study and/or the Acid Precipitation in Ontario Study.

The limnological portion of the Lakeshore Capacity Study (1975-81) was initiated to investigate the relationships between lakeshore development and lake trophic status in low ionic strength Precambrian lakes. The Acid Precipitation in Ontario Study (1979-present) was initiated, in part, to investigate the effects of the deposition of strong acids on aquatic and terrestrial ecosystems in Ontario. The primary findings of these studies have been and will continue to be published as reviewed papers and technical reports.

Abstract

Physical and chemical data summaries for twelve selected lakes in the Muskoka/Haliburton area as part of a joint MOE/MNR through the Acid Precipitation in Ontario Study are presented.

Reid, R.A., B.A. Locke, R.E. Girard and A.C. Nicolls. 1984. Physical and chemical data summary for twelve selected lakes in the Muskoka/Haliburton area (1981 - 1983). Ont. Min. Envir. Data Report DR 84/1.

TABLE OF CONTENTS


| | | Page |
|---|---|---|
| I | Introduction ..... | 1 |
| II | Methods | |
| | i) Lake and sampling locations ..... | 1- 2 |
| | ii) Physical measurements ..... | 1 |
| | iii) Chemical sampling ..... | 3- 5 |
| III | Appendices - Data Summaries | |
| | i) Light measurements and extinction coefficients ... | 6- 13 |
| | ii) Morphometric data for the 12 study lakes ..... | 14- 38 |
| | iii) Lake chemistry data averages ..... | 39-136 |
| | iv) Lake chlorophyll and secchi disc data averages ... | 137-157 |
| | v) Lake physical data plots ..... | 158-318 |
| | vi) Lake light profile data plots ..... | 320-355 |

# LIST OF TABLES


| | | Page |
|---|---|---|
| 1. | Sample bottle codes and preparation | 4 |
| 2. | List of chemical parameters measured, sample bottle types and location of chemical analysis | 5 |
| 3. | Summary of light measurements and extinction coefficient calculations | 6- 13 |
| 4. | Summary of morphometric data for the 12 study lakes | 14 |
| 5. | Detailed morphometric information for Big Porcupine Lake | 16 |
| 6. | Detailed morphometric information for Bonnechere Lake | 18 |
| 7. | Detailed morphometric information for Clear Lake | 20 |
| 8. | Detailed morphometric information for Crown Lake | 22 |
| 9. | Detailed morphometric information for Delano Lake | 24 |
| 10. | Detailed morphometric information for Kimball Lake | 26 |
| 11. | Detailed morphometric information for Lake Louisa | 28 |
| 12. | Detailed morphometric information for Nunikani Lake | 30 |
| 13. | Detailed morphometric information for Sherborne Lake | 32 |
| 14. | Detailed morphometric information for Smoke Lake | 34 |
| 15. | Detailed morphometric information for Timberwolf Lake | 36 |
| 16. | Detailed morphometric information for Westward Lake | 38 |
| 17. | Big Porcupine Lake chemistry data averages | 39- 42 |
| 18. | Bonnechere Lake chemistry data averages | 43- 46 |
| 19. | Clear Lake chemistry data averages | 47- 67 |
| 20. | Crown Lake chemistry data averages | 68- 71 |
| 21. | Delano Lake chemistry data averages | 72- 79 |
| 22. | Kimball Lake chemistry data averages | 80- 83 |
| 23. | Lake Louisa chemistry data averages | 84- 94 |
| 24. | Nunikani Lake chemistry data averages | 95- 98 |
| 25. | Sherborne Lake chemistry data averages | 99-106 |
| 26. | Smoke Lake chemistry data averages | 107-117 |
| 27. | Timberwolf Lake chemistry data averages | 118-125 |
| 28. | Westward Lake chemistry data averages | 126-136 |
| 29. | Big Porcupine Lake chlorophyll and Secchi disc data averages | 137 |
| 30. | Bonnechere Lake chlorphyll and Secchi disc data averages | 138 |

# LIST OF TABLES


| | | Page |
|---|---|---|
| 31. | Clear Lake chlorophyll and Secchi disc data averages | 139-142 |
| 32. | Crown Lake chlorophyll and Secchi disc data averages | 143 |
| 33. | Delano Lake chlorophyll and Secchi disc data averages | 144-145 |
| 34. | Kimball Lake chlorophyll and Secchi disc data averages | 146 |
| 35. | Lake Louisa chlorophyll and Secchi disc data averages | 147-148 |
| 36. | Nunikani Lake chlorophyll and Secchi disc data averages | 149 |
| 37. | Sherborne Lake chlorophyll and Secchi disc data averages | 150-151 |
| 38. | Smoke Lake chlorophyll and Secchi disc data averages | 152-153 |
| 39. | Timberwolf Lake chlorophyll and Secchi disc data averages | 154-155 |
| 40. | Westward Lake chlorophyll and Secchi disc data averages | 156-157 |
| 41. | Big Porcupine Lake physical data plots | 158-163 |
| 42. | Bonnechere Lake physical data plots | 164-169 |
| 43. | Clear Lake physical data plots | 170-197 |
| 44. | Crown Lake physical data plots | 198-205 |
| 45. | Delano Lake physical data plots | 206-217 |
| 46. | Kimball Lake physical data plots | 218-223 |
| 47. | Lake Louisa physical data plots | 224-244 |
| 48. | Nunikani Lake physical data plots | 245-250 |
| 49. | Sherborne Lake physical data plots | 251-261 |
| 50. | Smoke Lake physical data plots | 262-283 |
| 51. | Timberwolf Lake physical data plots | 284-296 |
| 52. | Westward Lake physical data plots | 297-318 |
| 53. | Big Porcupine Lake light profile data plots | 320-321 |
| 54. | Bonnechere Lake light profile data plots | 322-323 |
| 55. | Clear Lake light profile data plots | 324-327 |
| 56. | Crown Lake light profile data plots | 328-329 |
| 57. | Delano Lake light profile data plots | 330-332 |
| 58. | Kimball Lake light profile data plots | 333-334 |
| 59. | Lake Louisa light profile data plots | 335-338 |
| 60. | Nunikani Lake light profile data plots | 339-340 |
| 61. | Sherborne Lake light profile data plots | 341-343 |
| 62. | Smoke Lake light profile data plots | 344-347 |
| 63. | Timberwolf Lake light profile data plots | 348-351 |
| 64. | Westward Lake light profile data plots | 352-355 |

# LIST OF FIGURES


1. Location of study area showing 12 lakes 2
2. Morphometric map of Big Porcupine Lake 15
3. Morphometric map of Bonnechere Lake 17
4. Morphometric map of Clear Lake 19
5. Morphometric map of Crown Lake 21
6. Morphometric map of Delano Lake 23
7. Morphometric map of Kimball Lake 25
8. Morphometric map of Lake Louisa 27
9. Morphometric map of Nunikani Lake 29
10. Morphometric map of Sherborne Lake 31
11. Morphometric map of Smoke Lake 33
12. Morphometric map of Timberwolf Lake 35
13. Morphometric map of Westward Lake 37

# INTRODUCTION

Several lakes were selected by a joint MNR-MOE group to study the water chemistry and fisheries changes through time. Seven of the lakes are within the boundaries of Algonquin Provincial Park and five lakes are in Haliburton County. This report is a summary of the physical and chemical data collected from the twelve lakes during 1981-1983.

# METHODS

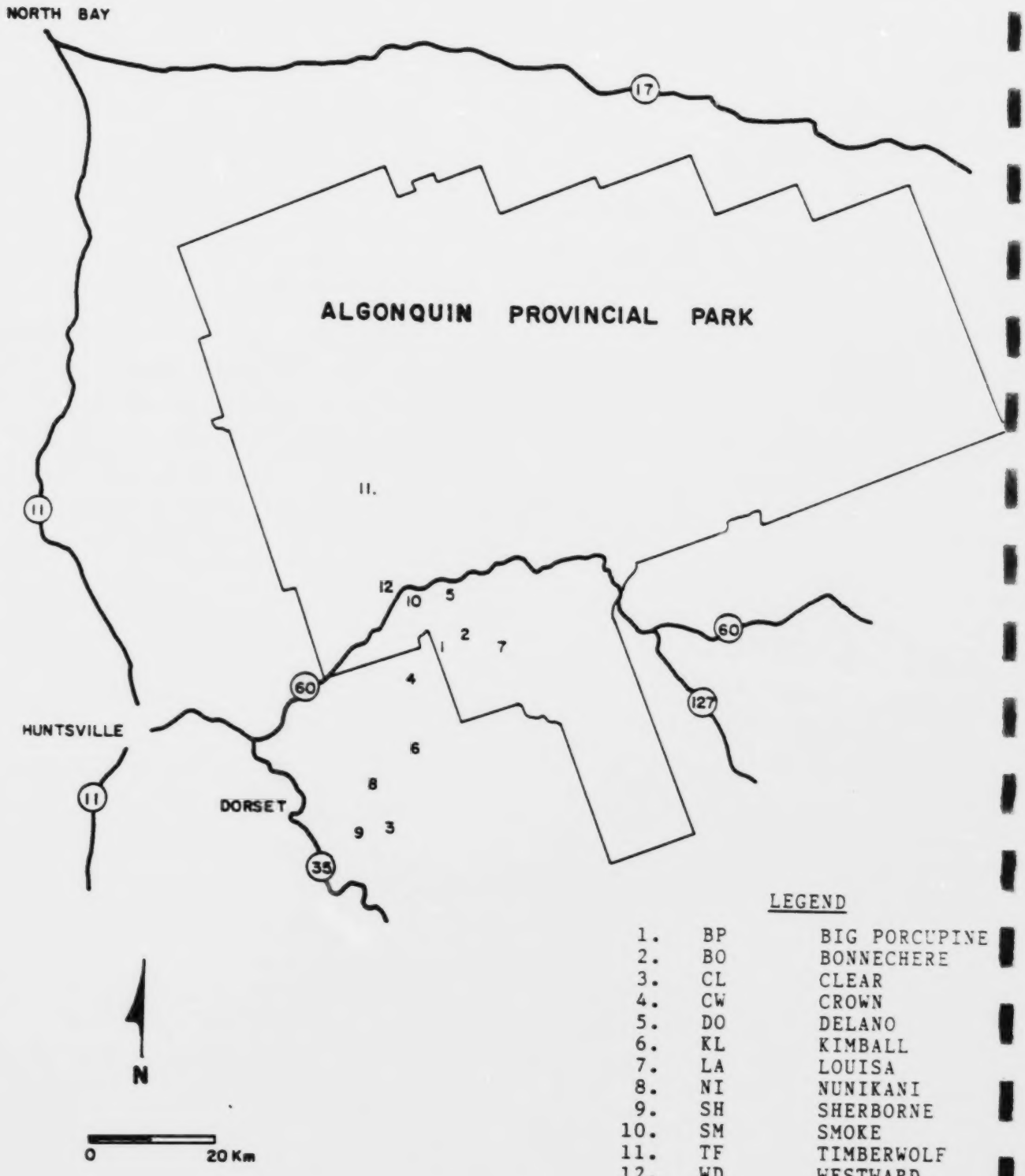
## Lake and Sampling Locations

The location of the study lakes is shown in Fig. 1. All water samples were collected from the deepest location in each of the lakes including single and multi-basin lakes. The deep spots were all marked by floats.

## Physical Measurements

Temperature of the lakes was measured at 1 m intervals from the surface to the lake bottom (0.5 m intervals through the metalimnion) with a Flett Research Mark II digital telethermometer. The depths of the epilimnion, metalimnion and hypolimnion were calculated from the temperature vs the depth plot (Wetzel, 1975). The temperature profiles of all the lakes, along with oxygen, pH and dissolved inorganic carbon profiles are shown in Appendix v. Photosynthetically active radiation was measured using a Li-Cor Model 185 light meter equipped with a LI-192 cosine corrected quantum flat-head sensor. Irradiance vs depth plots were constructed for sampling date and are shown in Appendix vi. Extinction coefficient was estimated by linear regression.

Fig. 1 Location of the Study Lakes



Chemical Sampling

Bathymetric maps were available for all the study lakes and from these volumetric data (2m contour intervals) was used to volume-weight all water samples. Samples for chemical analysis were taken using a Cole-Parmer peristaltic pump and calibrated tygon tubing at 2m intervals commencing 1m below the surface to 11m and then every 2-10 metres depending on the maximum depth of the lake (see Table 4). An aliquot of water proportional to the volume of the stratum represented was removed from each depth and added to a pre-rinsed 8 L carboy so that a single volume weighted composite sample was obtained for each of the epilimnion, metalimnion and hypolimnion of the lake. During times of thermal homogeneity water from all depths was pooled to give a single volume-weighted sample representative of the entire lake. Separate samples were taken at specific depths for oxygen, pH and dissolved inorganic carbon (DIC profiles done on Clear, Delano, Louisa, Smoke, Timberwolf and Westward) measurements. These results are shown in Appendix v. A few samples collected prior to 1981 have been included in this report. Sample containers (see Tables 1 and 2) were filled by pouring the composite samples through 76 µm Nitrex mesh to remove coarse particulates. Samples were submitted for analysis to either the Dorset or Toronto laboratory (see Table 2).

The lake chemistry data are summarized on Tables 17-28. The means were calculated for the spring turnover, the summer stratification, the fall turnover and the winter (under ice) time periods. These means were calculated using volume-weighted samples. Winter (under ice) data were collected for Smoke and Louisa (Jan. 1982) and Clear ( Jan. 1979) only.

The annual means summary (01 June - 31 May) are based on monthly samples collected from May to November.

Table 1 Sample bottle codes and preparation

| Bottle Code | Bottle Type | Bottle Preparation |
|---|---|---|
| 1 | 125 ml "Prince of Wales" | - unique bottle for each lake and depth<br>- pre-rinsed with sample |
| 2 | 1000 ml plastic | - acid bath (10% HCl) for 6 hours<br>- de-ionized water bath for 6 hours, D.W. rinse<br>- check conductivity (<2.0) |
| 3 | 250 ml "BOD" | - pre-rinse with sample |
| 4 | 250 ml brown Nalgene | - de-ionized water rinse |
| 5 | 50 ml culture tubes | - autoclaved after each use |
| 6 | 1 L glass | - pre-rinse with sample |
| 7 | 250 ml polystyrene | - rinsed in 10% HCl, sample fixed with 1 ml $HNO_3$ (after June, 1982)<br>- Jan. 1982 - June 1982 pre-rinsed with sample for Si only |
| 8 | 600 ml polystyrene | - pre-rinsed with sample |
| 9 | 500 ml plastic | - acid washed (Toronto lab)<br>- sample fixed with 1 ml $HNO_3$ |
| 10 | 50 ml Pyrex tube | - unique bottle for each site (profile and lake strata), pre-rinse with sample |
| 11 | 1 L brown Nalgene | - pre-rinse with sample |
| 12 | 15 ml polypropylene-centrifuge tube | - preleached overnight in 1% conc. $HNO_3$<br>- rinsed 4 times with double de-ionized water |

Table 2 List of chemical parameters measured, sample bottle types and location of chemical analysis (D=Dorset, T=Toronto). Bottle codes as in Table 1. All parameters were measured for each sampling date with the exception of those marked.

| Parameter | Date | Bottle Code | Laboratory Location |
|---|---|---|---|
| $NH_3$, $NO_2$, $NO_3$ | 1979-1982 | 2 | D |
| $NH_3$, $NO_2$, $NO_3$ | 1983 (April) | 8 | D |
| TKN, colour, cond. | 1979-1982 | 2 | D |
| TKN, colour, cond. | 1983 (April) | 8 | D |
| pH, TIP, TFE | 1979-1982 | 3 | D |
| pH, TIP, TFE | 1982 - present | 4 | D |
| TP (triplicate) | 1976 - present | 5 | D |
| Fe, Mn, Ca, Mg, Na, K, Cl, $SO_4$, Si, DIC, DOC | 1976-1982 | 6 | T |
| Cl, $SO_4$ by ion chromatography | 1981 | 6 | T |
| Si | 1982 | 7 | T |
| Si, Ca, Mg, Na, K, Cl, $SO_4$, DOC | 1982 - June 1983 | 8 | T |
| DIC (gas cap) | 1982 - present | 5 | D |
| Al, Mn, Fe, Zn | 1982 | 7 | T |
| Al, Zn | June - 1983 | 12 | D |
| Si, Ca, Mg, Na, K, Cl, $SO_4$, DOC, Fe, Mn | June - 1983 | 8 | T |
| (Cu, Ni, Zn, Mo, Al, Cd, Co, Pb)[2] | 1976-1978 | 9 | T |
| (Cu, Ni, Zn, Al, Pb)[3] | 1978 - June 1983 | 9 | T |
| (Cu, Ni, Pb, Co, Cd, Cr, As)[2] | June - 1983 | 9 | T |
| $O_2$ profile | 1976 - present | 1 | D |
| pH profile | 1978 - present | 1 | D |
| DIC profile (LA,SM,WD,DO,TF,CL[1]) | 1981 - present | 10 | D |
| Chlorophyll a, b, acid a | 1976 - present | 11 | D/T |
| Phytoplankton | 1976 - present | 6 | T |

1. See Fig. 1 for station abbreviations.
2. Measured 2 times per year. (Note different groups of metals for three time periods)

## REFERENCES

Hutchison, G.E. 1957. A Treatise on Limnology. John Wiley and Sons Inc., 1015 pp.

Ontario Ministry of the Environment. 1981. Outlines of Analytical Methods. Ont. Min. Envir., Laboratory Services Branch, June 1981, 146 pp.

Nicolls, R. Reid and R. Girard. 1983. Morphometry of the Muskoka-Haliburton study lakes. Ont. Min. Envir. Data Report DR 83/3

Scheider, W.A., R.A. Reid, B.A. Locke and L.D. Scott. 1983. Studies of lakes and watersheds in Muskoka-Haliburton, Ontario: Methodology (1976-1982) Ont. Min. Envir. Data Report DR 83/1

Appendix i: Light measurements and Extinction Coefficients

Table 3 Summary of light measurements and extinction coefficient calculations. Irradiance = total downwelling cosine-corrected irradiance and the extinction coeficient ($\eta$) = slope of line; y = mx+b where y = depth and x = irradience. The sub-surface light ($I_o$; $\mu eins \cdot m^{-2} \cdot sec^{-1}$) is taken at 5 cm. The cloud cover is subjectively estimated by the field sampling crew. The value is recorded in increments of 10%.

| Date | Time | $\eta$ ($m^{-1}$) | $I_o$ | $r^2$ | N | Secchi depth (m) | depth of 1% $I_o$ (m) | % cloud cover |
|---|---|---|---|---|---|---|---|---|
| BIG PORCUPINE | | | | | | | | |
| 83.05.17 | 1115 | 0.193 | 1150 | 0.977 | 16 | 4.5 | 10.0 | 40 |
| 83.06.14 | 1215 | 0.129 | 1150 | 0.998 | 16 | 9.0 | 15.0 | 0 |
| 83.07.12 | 1010 | 0.136 | 875 | 0.994 | 16 | 5.9 | 13.6 | 50 |
| 83.08.10 | 1200 | 0.135 | 500 | 0.988 | 10 | 7.0 | 11.5 | 50 |
| 83.09.08 | 1305 | 0.151 | 1200 | 0.999 | 21 | 6.1 | 13.0 | 30 |
| 83.10.06 | 1145 | 0.096 | 91 | 0.989 | 15 | 7.2 | 14.9 | 100 |
| mean | | 0.140 | | | | 6.6 | | |
| BONNECHERE | | | | | | | | |
| 83.05.17 | 1200 | 0.348 | 450 | 0.997 | 5 | 4.0 | 9.0 | 40 |
| 83.06.14 | 1335 | 0.228 | 1250 | 0.996 | 14 | 6.0 | 8.9 | 80 |
| 83.07.12 | 1120 | 0.187 | 510 | 0.978 | 13 | 4.3 | 10.4 | 80 |
| 83.08.10 | 1045 | 0.197 | 950 | 0.996 | 13 | 6.0 | 10.5 | 60 |
| 83.09.08 | 1420 | 0.221 | 1100 | 0.994 | 20 | 4.8 | 10.0 | 30 |
| 83.10.06 | 1040 | 0.204 | 900 | 0.985 | 13 | 5.9 | 9.9 | 60 |
| mean | | 0.231 | | | | 5.2 | | |

Table 3 cont'd

| Date | Time | $\eta$ ($m^{-1}$) | $I_o$ | $r^2$ | N | Secchi depth (m) | depth of 1% $I_o$ (m) | % cloud cover |
|---|---|---|---|---|---|---|---|---|
| CLEAR LAKE | | | | | | | | |
| 82.05.11 | 1315 | 0.108 | 1100 | 0.996 | 20 | 8.5 | 18.0 | 40 |
| 82.06.09 | 1415 | 0.108 | 1050 | 0.996 | 12 | 9.5 | 16.0 | 30 |
| 82.07.06 | 1345 | 0.095 | 1300 | 0.994 | 22 | 7.0 | 19.8 | 30 |
| 82.08.05 | 1320 | 0.099 | 350 | 0.972 | 10 | - | 21.0 | 50 |
| 82.09.28 | 1035 | 0.086 | 180 | 0.995 | 22 | 10.0 | 21.3 | 100 |
| 82.11.01 | 1220 | 0.091 | 115 | 0.993 | 22 | 8.0 | 20.0 | 100 |
| mean | | 0.098 | | | | 8.6 | | |
| 83.05.18 | 1200 | 0.145 | 1200 | 0.991 | 13 | 10.5 | 15.0 | 0 |
| 83.06.14 | 0850 | 0.101 | 680 | 0.994 | 19 | 12.6 | 16.5 | 0 |
| 83.07.13 | 1100 | - | 1100 | - | - | 10.1 | 21.0 | 50 |
| 83.08.09 | 1100 | 0.101 | 1250 | 0.978 | 21 | 9.1 | 19.8 | 0 |
| 83.09.07 | 1100 | 0.102 | 1000 | 0.991 | 16 | 7.5 | 17.1 | 80 |
| 83.10.04 | 1000 | 0.086 | 39 | 0.997 | 25 | 8.5 | 22.1 | 100 |
| mean | | 0.107 | | | | 9.7 | | |
| CROWN LAKE | | | | | | | | |
| 83.05.17 | 1015 | 0.124 | 1075 | 0.979 | 16 | 8.0 | 16.0 | 30 |
| 83.06.14 | 1040 | 0.109 | 980 | 0.996 | 19 | 8.5 | 18.0 | 0 |
| 83.07.12 | 0850 | 0.110 | 460 | 0.994 | 16 | 7.3 | 16.4 | 0 |
| 83.08.10 | 1325 | 0.121 | 625 | 0.996 | 16 | 7.0 | 16.0 | 80 |
| 83.09.08 | 1200 | 0.129 | 1650 | 0.997 | 21 | 6.5 | 16.0 | 40 |
| 83.10.06 | 1250 | 0.114 | 200 | 0.991 | 18 | 7.0 | 16.0 | 100 |
| mean | | 0.118 | | | | 7.4 | | |

Table 3 cont'd

| Date | Time | $\eta$ ($m^{-1}$) | $I_o$ | $r^2$ | N | Secchi depth (m) | depth of 1% $I_o$ (m) | % cloud cover |
|---|---|---|---|---|---|---|---|---|
| DELANO | | | | | | | | |
| 82.05.10 | 1355 | 0.359 | 1200 | 0.994 | 13 | 3.0 | 3.7 | 20 |
| 82.06.07 | 1300 | 0.473 | 950 | 0.984 | 7 | 2.9 | 4.25 | 80 |
| 82.07.07 | 0920 | 0.351 | 520 | 0.995 | 12 | 3.2 | 5.2 | 90 |
| 82.08.03 | 1200 | 0.353 | 275 | 0.998 | 12 | - | 5.8 | 100 |
| 82.09.01 | 0905 | 0.351 | 290 | 0.994 | 10 | 5.0 | 7.0 | 100 |
| 82.09.28 | 1330 | 0.363 | 170 | 0.987 | 11 | 4.0 | 6.1 | 100 |
| 82.11.01 | 0950 | 0.401 | 300 | 0.993 | 11 | 4.0 | 4.85 | 15 |
| mean | | 0.379 | | | | 3.7 | | |
| 83.05.16 | 0845 | - | - | - | - | 3.6 | - | 0 |
| 83.07.11 | 0900 | 0.342 | 310 | 0.994 | 8 | 3.1 | 6.4 | 90 |
| 83.08.08 | 1000 | 0.243 | 84 | 0.979 | 6 | 4.0 | 5.2 | 100 |
| 83.09.07 | 1220 | 0.301 | 270 | 0.999 | 12 | 4.2 | 6.5 | 90 |
| 83.10.03 | 0945 | 0.360 | 240 | 0.965 | 7 | 3.5 | 5.1 | 90 |
| mean | | 0.312 | | | | 3.7 | | |
| KIMBALL | | | | | | | | |
| 83.05.17 | 0915 | 0.179 | 850 | 0.994 | 14 | 7.5 | 11.5 | 10 |
| 83.06.13 | 1215 | 0.155 | 1250 | 0.998 | 15 | 7.5 | 11.5 | 0 |
| 83.07.13 | 0845 | 0.198 | 660 | 0.972 | 11 | 6.3 | 9.8 | 10 |
| 83.08.09 | 1215 | 0.167 | 950 | 0.992 | 13 | - | 13.7 | 0 |
| 83.09.08 | 1030 | 0.141 | 900 | 0.994 | 25 | 8.0 | 13.5 | 20 |
| 83.10.04 | 1215 | 0.126 | 63 | 0.996 | 18 | 6.9 | 16.0 | 100 |
| mean | | 0.161 | | | | 7.2 | | |

Table 3 cont'd

| Date | Time | $\eta$ ($m^{-1}$) | $I_o$ | $r^2$ | N | Secchi depth (m) | depth of 1% $I_o$ (m) | % cloud cover |
|---|---|---|---|---|---|---|---|---|
| LAKE LOUISA | | | | | | | | |
| 82.05.11 | 1010 | 0.139 | 345 | 0.996 | 14 | 6.0 | 13.5 | 100 |
| 82.06.09 | 0910 | 0.175 | 830 | 0.996 | 20 | 11.0 | 11.2 | 20 |
| 82.07.06 | 1145 | 0.153 | 1100 | 0.997 | 16 | 7.0 | 13.2 | 30 |
| 82.08.05 | 1140 | 0.124 | 1300 | 0.989 | 20 | 6.0 | 12.7 | 70 |
| 82.09.08 | 1210 | 0.146 | 1150 | 0.996 | 23 | 7.3 | 12.5 | 30 |
| 82.09.30 | 1020 | 0.145 | 620 | 0.993 | 21 | 7.0 | 12.0 | 60 |
| 82.11.01 | 1045 | 0.127 | 310 | 0.999 | 20 | 6.5 | 13.8 | 80 |
| mean | | 0.144 | | | | 7.3 | | |
| 83.05.16 | 1300 | 0.177 | 1100 | 0.994 | 15 | 6.0 | 11.0 | 0 |
| 83.06.15 | 0845 | 0.150 | 570 | 0.995 | 11 | 9.4 | 12.0 | 0 |
| 83.07.12 | 1245 | 0.158 | 1250 | 0.995 | 14 | 5.6 | 11.5 | 30 |
| 83.08.10 | 0924 | 0.180 | 780 | 0.995 | 15 | 7.5 | 11.0 | 60 |
| 83.09.08 | 1515 | 0.152 | 950 | 0.997 | 22 | 6.0 | 12.5 | 20 |
| mean | | 0.163 | | | | 6.9 | | |
| NUNIKANI LAKE | | | | | | | | |
| 83.05.18 | 1015 | 0.194 | 1025 | 0.998 | 15 | 6.0 | 10.5 | 0 |
| 83.06.13 | 1045 | 0.118 | 950 | 0.995 | 13 | 6.0 | 12.5 | 0 |
| 83.07.13 | 1000 | 0.163 | 975 | 0.990 | 15 | 6.1 | 12.7 | 30 |
| 83.08.09 | 0950 | 0.154 | 660 | 0.995 | 15 | 7.4 | 12.9 | 0 |
| 83.09.07 | 1000 | 0.169 | 800 | 0.994 | 12 | 7.4 | 12.0 | 70 |
| 83.10.04 | 1110 | 0.143 | 90 | 0.995 | 15 | 6.0 | 13.3 | 100 |
| mean | | 0.157 | | | | 6.5 | | |

Table 3 cont'd

| Date | Time | $\eta$ ($m^{-1}$) | $I_o$ | $r^2$ | N | Secchi depth (m) | depth of 1% $I_o$ (m) | % cloud cover |
|---|---|---|---|---|---|---|---|---|
| SHERBORNE | | | | | | | | |
| 82.06.08 | 1130 | 0.138 | 580 | 0.998 | 16 | 8.0 | 14.0 | 90 |
| 82.06.29 | 1100 | 0.143 | 270 | 0.998 | 16 | 7.5 | 13.0 | 100 |
| 82.07.22 | 1000 | 0.180 | 850 | 0.997 | 12 | 8.0 | 11.0 | 80 |
| 82.08.16 | 0945 | 0.212 | 650 | 0.994 | 9 | 6.8 | 8.5 | 0 |
| mean | | 0.168 | | | | 7.6 | | |
| 83.05.18 | 0900 | 0.225 | 800 | 0.991 | 13 | 6.0 | 9.5 | 0 |
| 83.06.13 | 0925 | 0.142 | 790 | 0.997 | 14 | 9.0 | 13.5 | 0 |
| 83.07.13 | 1210 | 0.150 | 1500 | 0.995 | 16 | 6.0 | 13.1 | 40 |
| 83.08.09 | 0850 | 0.180 | 670 | 0.999 | 13 | 7.1 | 11.0 | 10 |
| 83.09.07 | 0845 | 0.142 | 73 | 0.991 | 14 | 6.5 | 13.0 | 90 |
| 83.10.04 | 0850 | 0.153 | 25 | 0.995 | 17 | 6.3 | 13.5 | 100 |
| mean | | 0.165 | | | | 6.8 | | |

Table 3 cont'd

| Date | Time | $\eta$ ($m^{-1}$) | $I_o$ | $r^2$ | N | Secchi depth (m) | depth of 1% $I_o$ (m) | % cloud cover |
|---|---|---|---|---|---|---|---|---|
| SMOKE LAKE | | | | | | | | |
| 82.05.10 | 0950 | 0.215 | 750 | 0.981 | 11 | 5.6 | 9.0 | 0 |
| 82.06.07 | 1030 | 0.208 | 1100 | 0.995 | 12 | 4.4 | 9.2 | 60 |
| 82.07.07 | 1200 | 0.169 | 1200 | 0.996 | 22 | 4.5 | 11.0 | 50 |
| 82.08.03 | 0915 | 0.192 | 180 | 0.997 | 17 | 4.5 | 9.5 | 100 |
| 82.09.01 | 1004 | 0.150 | 97 | 0.997 | 20 | 5.0 | 13.0 | 100 |
| 82.09.28 | 1210 | 0.159 | 185 | 0.999 | 22 | 6.5 | 12.1 | 100 |
| 82.11.15 | 1110 | 0.186 | 480 | 0.998 | 18 | 5.4 | 8.9 | 80 |
| mean | | 0.183 | | | | 5.1 | | |
| 83.05.16 | 1100 | 0.252 | 1000 | 0.994 | 11 | 5.0 | 10.5 | 0 |
| 83.06.13 | 1350 | 0.196 | 1150 | 0.993 | 14 | 5.8 | 8.5 | 70 |
| 83.07.11 | 1230 | 0.173 | 440 | 0.994 | 12 | 4.7 | 11.1 | 80 |
| 83.08.08 | 1050 | - | - | - | - | 3.9 | - | 100 |
| 83.09.07 | 1345 | 0.147 | 330 | 0.997 | 9 | 4.8 | 10.3 | 60 |
| 83.10.03 | 1145 | 0.183 | 950 | 0.996 | 12 | 5.75 | 10.0 | 70 |
| mean | | 0.190 | | | | 5.0 | | |

Table 3 cont'd

| Date | Time | $\eta$ ($m^{-1}$) | $I_o$ | $r^2$ | N | Secchi depth (m) | depth of 1% $I_o$ (m) | % cloud cover |
|---|---|---|---|---|---|---|---|---|
| TIMBERWOLF | | | | | | | | |
| 82.05.11 | 0845 | 0.332 | 76 | 0.999 | 8 | 3.5 | 4.0 | 100 |
| 82.06.09 | 1120 | 0.360 | 1100 | 0.994 | 7 | 4.0 | 6.1 | 50 |
| 82.07.06 | 0930 | 0.322 | 820 | 0.998 | 15 | 3.8 | 5.8 | 20 |
| 82.08.05 | 1000 | 0.264 | 1000 | 0.994 | 11 | 6.7 | 8.0 | 70 |
| 82.09.08 | 1055 | 0.276 | 860 | 0.993 | 12 | 5.4 | 7.8 | 0 |
| 82.09.30 | 1205 | 0.260 | 750 | 0.999 | 11 | 4.3 | 8.0 | 0 |
| 82.11.15 | 0945 | 0.393 | 175 | 0.991 | 9 | 3.4 | 5.0 | 90 |
| mean | | 0.315 | | | | 4.4 | | |
| 83.05.16 | 1430 | 0.333 | 1150 | 0.984 | 8 | 3.0 | 6.0 | 20 |
| 83.06.15 | 1035 | 0.275 | 1000 | 0.996 | 8 | 4.2 | 6.5 | 0 |
| 83.07.11 | 1100 | 0.242 | 560 | 0.992 | 11 | 3.7 | 8.5 | 100 |
| 83.08.08 | 1240 | 0.263 | 810 | 0.995 | 10 | 5.2 | 7.5 | 100 |
| 83.09.07 | 1500 | 0.294 | 1000 | 0.997 | 14 | 4.1 | 6.5 | 80 |
| 83.10.03 | 1003 | 0.240 | 240 | 0.985 | 9 | 4.0 | 8.0 | 90 |
| mean | | 0.275 | | | | 4.0 | | |

Table 3 cont'd

| Date | Time | $\eta$ ($m^{-1}$) | $I_o$ | $r^2$ | N | Secchi depth (m) | depth of 1% $I_o$ (m) | % cloud cover |
|---|---|---|---|---|---|---|---|---|
| WESTWARD LAKE | | | | | | | | |
| 82.05.10 | 1200 | 0.100 | 1100 | 0.996 | 6 | 13.0 | 24.1 | 0 |
| 82.06.07 | 0900 | 0.103 | 300 | 0.994 | 15 | 7.5 | 15.0 | 90 |
| 82.07.07 | 1200 | 0.079 | 440 | 0.991 | 20 | - | 22.0 | 50 |
| 82.08.03 | 1050 | 0.091 | 146 | 0.996 | 20 | - | 21.0 | 100 |
| 82.09.01 | 1155 | 0.085 | 260 | 0.995 | 22 | 8.4 | 21.0 | 100 |
| 82.09.30 | 1330 | 0.102 | 950 | 0.995 | 22 | 10.0 | 19.1 | 0 |
| 82.11.22 | 1035 | 0.105 | 520 | 0.985 | 22 | 11.0 | 19.0 | 30 |
| mean | | 0.095 | | | | 10.0 | | |
| 83.05.16 | 1000 | 0.097 | 1000 | 0.993 | 14 | 8.0 | 22.8 | 0 |
| 83.06.15 | 1130 | 0.086 | 1200 | 0.990 | 19 | 9.6 | 19.1 | 0 |
| 83.07.11 | 1000 | 0.089 | 325 | 0.996 | 25 | 8.5 | 22.7 | 100 |
| 83.08.08 | 0840 | 0.113 | 530 | 0.995 | 19 | 6.2 | 17.5 | 50 |
| 83.09.08 | 0840 | 0.122 | 440 | 0.995 | 18 | 5.5 | 15.5 | 10 |
| 83.10.03 | 0835 | 0.120 | 120 | 0.992 | 11 | 4.5 | 11.6 | 90 |
| mean | | 0.105 | | | | 7.1 | | |

Appendix ii: Morphometric data for the twelve study lakes

Table 4

SUMMARY OF MORPHOMETRIC DATA FOR THE 12 STUDY LAKES

| | Area (ha) | Mean Depth (m) | Maximum Depth (m) | Volume ($m^3 x 10^5$) |
|---|---|---|---|---|
| BIG PORCUPINE | 235 | 7.5 | 30.5 | 177.3 |
| BONNECHERE | 105 | 6.4 | 21.4 | 67.0 |
| CLEAR | 88.4 | 12.4 | 33.0 | 109.1 |
| CROWN | 136 | 8.0 | 30.0 | 108.4 |
| DELANO | 23.9 | 7.1 | 18.6 | 17.0 |
| KIMBALL | 213 | 22.0 | 61.0 | 464.0 |
| LOUISA | 531 | 16.1 | 61.0 | 855.9 |
| NUNIKANI | 116 | 7.9 | 24.0 | 91.7 |
| SHERBORNE | 252 | 9.6 | 35.1 | 240.9 |
| SMOKE | 679 | 16.2 | 55.0 | 1099.0 |
| TIMBERWOLF | 167 | 7.4 | 20.4 | 124.0 |
| WESTWARD | 63.3 | 20.5 | 44.0 | 129.5 |

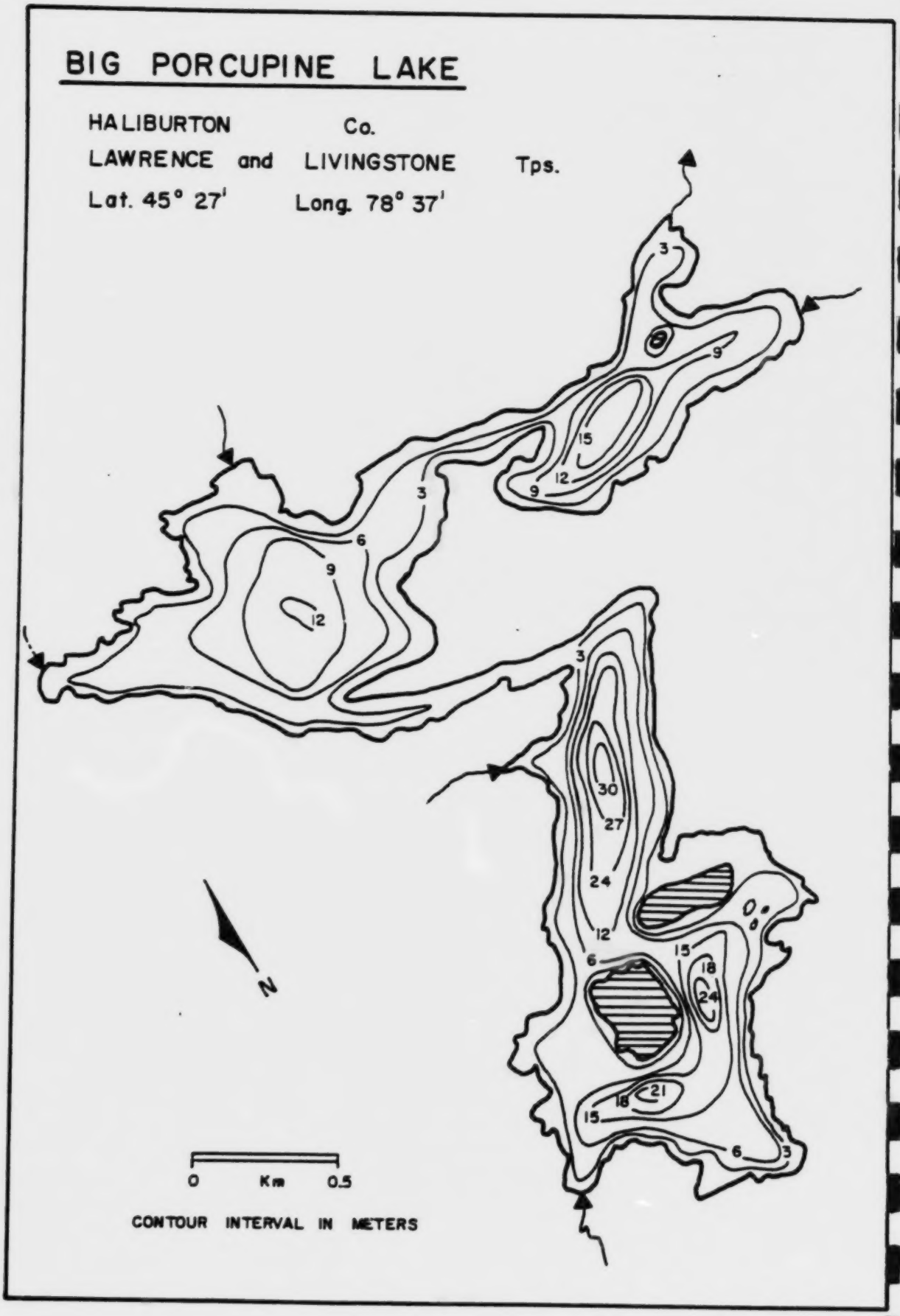

BIG PORCUPINE LAKE
HALIBURTON Co.
LAWRENCE and LIVINGSTONE Tps.
Lat. 45° 27'
Long. 78° 37'
3
9
15
12
9
3
6
9
12
3
30
27
24
12
6
15
18
24
18
21
15
6
3
N
0 Km 0.5
CONTOUR INTERVAL IN METERS

Table 5

BIG PORCUPINE LAKE

| Contour Depth (m) | Contour Area (ha) | Stratum Volume ($m^3 x 10^5$) |
|---|---|---|
| 0 | 235 | |
| | | 42.0 |
| 2 | 185 | |
| | | 33.0 |
| 4 | 145 | |
| | | 25.6 |
| 6 | 111 | |
| | | 19.9 |
| 8 | 88.1 | |
| | | 15.5 |
| 10 | 67.2 | |
| | | 11.5 |
| 12 | 48.0 | |
| | | 8.41 |
| 14 | 36.4 | |
| | | 6.29 |
| 16 | 26.7 | |
| | | 4.45 |
| 18 | 18.1 | |
| | | 3.26 |
| 20 | 14.6 | |
| | | 2.61 |
| 22 | 11.6 | |
| | | 1.94 |
| 24 | 7.95 | |
| | | 1.30 |
| 26 | 5.17 | |
| | | 0.819 |
| 28 | 3.11 | |
| | | 0.482 |
| 30 | 1.78 | |
| | | 0.092 |
| 30.5 | 1.50 | |

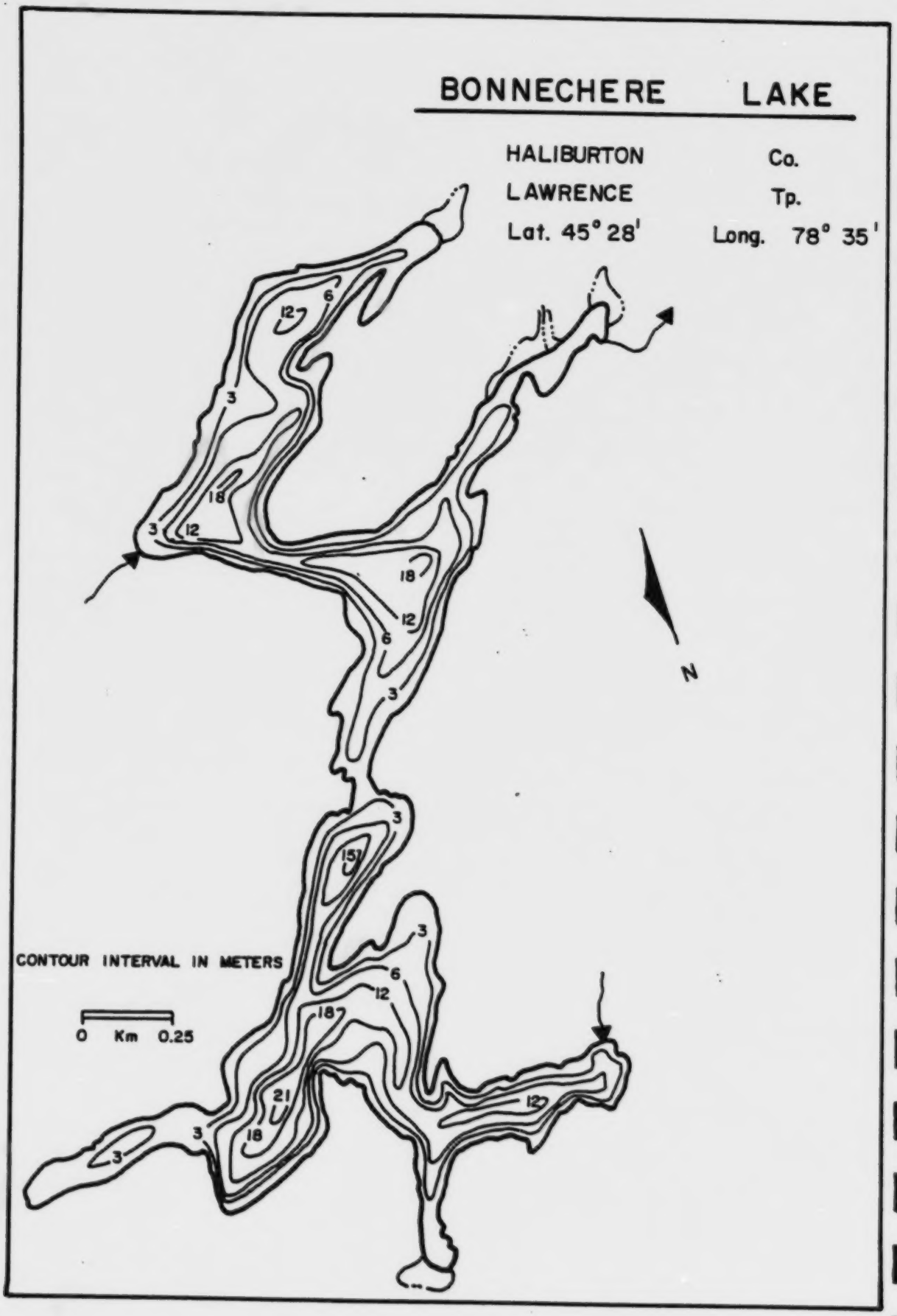

BONNECHERE LAKE
HALIBURTON Co.
LAWRENCE Tp.
Lat. 45° 28'
Long. 78° 35'
N
CONTOUR INTERVAL IN METERS
0 Km 0.25
3
6
12
18
15
21

Table 6

BONNECHERE LAKE

| Contour Depth (m) | Contour Area (ha) | Stratum Volume ($m^3 x 10^5$) |
|---|---|---|
| 0 | 105 | |
| | | 18.3 |
| 2 | 78.6 | |
| | | 13.8 |
| 4 | 59.9 | |
| | | 10.5 |
| 6 | 44.9 | |
| | | 8.03 |
| 8 | 35.6 | |
| | | 6.21 |
| 10 | 26.7 | |
| | | 4.46 |
| 12 | 18.2 | |
| | | 2.82 |
| 14 | 10.4 | |
| | | 1.58 |
| 16 | 5.65 | |
| | | 0.933 |
| 18 | 3.75 | |
| | | 0.511 |
| 20 | 1.52 | |
| | | 0.135 |
| 21.4 | 0.500 | |

Figure 4

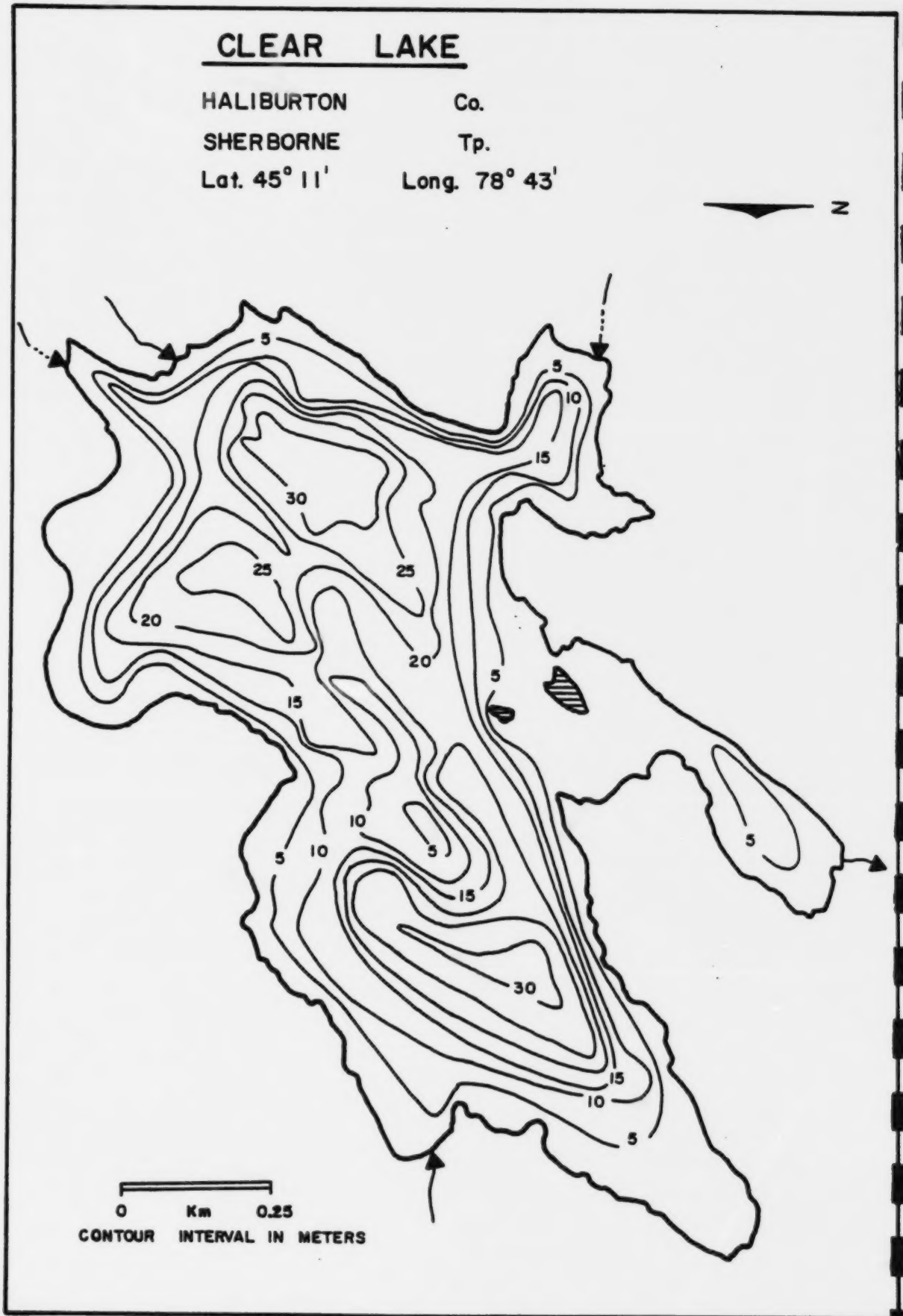

CLEAR LAKE
HALIBURTON Co.
SHERBORNE Tp.
Lat. 45° 11'
Long. 78° 43'
N
5
10
15
30
25
20
0 Km 0.25
CONTOUR INTERVAL IN METERS

Table 7

CLEAR LAKE

| Contour Depth (m) | Contour Area (ha) | Stratum Volume ($m^3 x 10^5$) |
|---|---|---|
| 0 | 88.4 | |
| | | 16.5 |
| 2 | 77.0 | |
| | | 14.3 |
| 4 | 66.4 | |
| | | 12.5 |
| 6 | 58.4 | |
| | | 11.1 |
| 8 | 52.7 | |
| | | 10.0 |
| 10 | 47.3 | |
| | | 8.89 |
| 12 | 41.6 | |
| | | 7.79 |
| 14 | 36.3 | |
| | | 6.73 |
| 16 | 31.1 | |
| | | 5.70 |
| 18 | 26.0 | |
| | | 4.72 |
| 20 | 21.3 | |
| | | 3.76 |
| 22 | 16.4 | |
| | | 2.84 |
| 24 | 12.1 | |
| | | 2.03 |
| 26 | 8.28 | |
| | | 1.32 |
| 28 | 5.04 | |
| | | 0.751 |
| 30 | 2.60 | |
| | | 0.250 |
| 33 | 0.298 | |

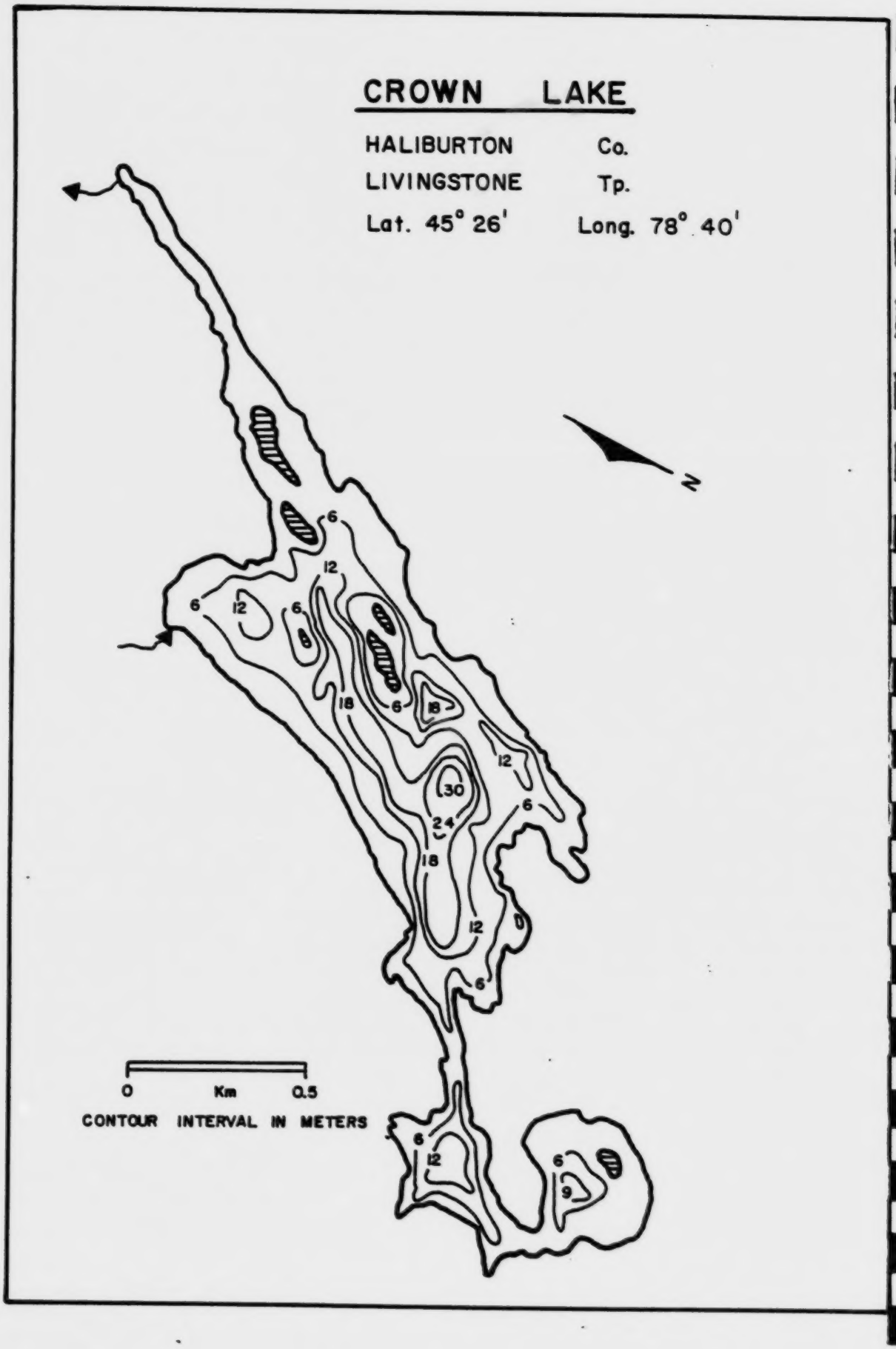

CROWN LAKE
HALIBURTON Co.
LIVINGSTONE Tp.
Lat. 45° 26' Long. 78° 40'
N
6
12
6
12
6
18
6
18
12
30
24
6
18
12
6
6
12
6
9
0 Km 0.5
CONTOUR INTERVAL IN METERS

Table 8

CROWN

| Contour Depth (m) | Contour Area (ha) | Stratum Volume ($m^3 x 10^5$) |
|---|---|---|
| 0 | 136 | |
| | | 25.0 |
| 2 | 114 | |
| | | 20.7 |
| 4 | 93.7 | |
| | | 16.9 |
| 6 | 75.5 | |
| | | 13.2 |
| 8 | 56.7 | |
| | | 9.67 |
| 10 | 40.5 | |
| | | 6.72 |
| 12 | 27.1 | |
| | | 4.84 |
| 14 | 21.4 | |
| | | 3.78 |
| 16 | 16.4 | |
| | | 2.84 |
| 18 | 12.1 | |
| | | 2.00 |
| 20 | 8.01 | |
| | | 1.26 |
| 22 | 4.76 | |
| | | .697 |
| 24 | 2.35 | |
| | | .392 |
| 26 | 1.59 | |
| | | .255 |
| 28 | .980 | |
| | | .147 |
| 30 | .516 | |

Figure 6

# DELANO LAKE

NIPISSING Dist.
CANISBAY Tp.
Lat. 45° 31' Long. 78° 36'

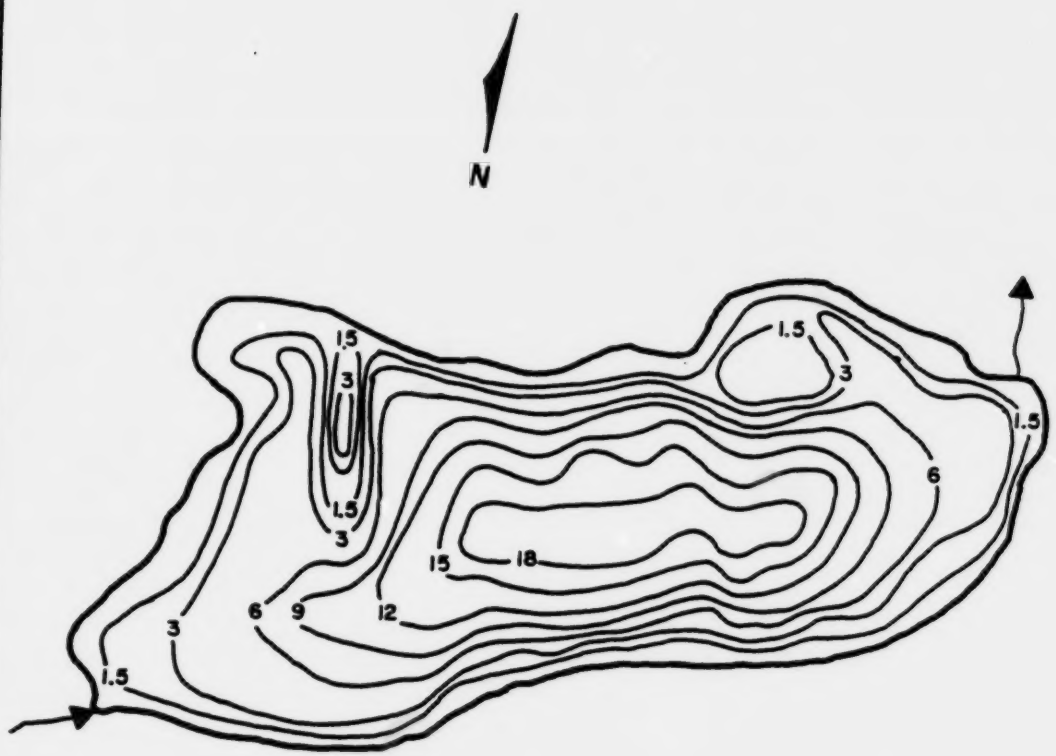


Table 9

DELANO LAKE

| Contour Depth (m) | Contour Area (ha) | Stratum Volume ($m^3 x 10^5$) |
|---|---|---|
| 0 | 23.9 | |
| | | 4.27 |
| 2 | 18.9 | |
| | | 3.25 |
| 4 | 13.7 | |
| | | 2.45 |
| 6 | 10.8 | |
| | | 1.98 |
| 8 | 9.01 | |
| | | 1.61 |
| 10 | 7.13 | |
| | | 1.29 |
| 12 | 5.79 | |
| | | 1.01 |
| 14 | 4.36 | |
| | | 0.710 |
| 16 | 2.80 | |
| | | 0.432 |
| 18 | 1.58 | |
| | | 0.032 |
| 18.6 | 0.000 | |

Figure 7

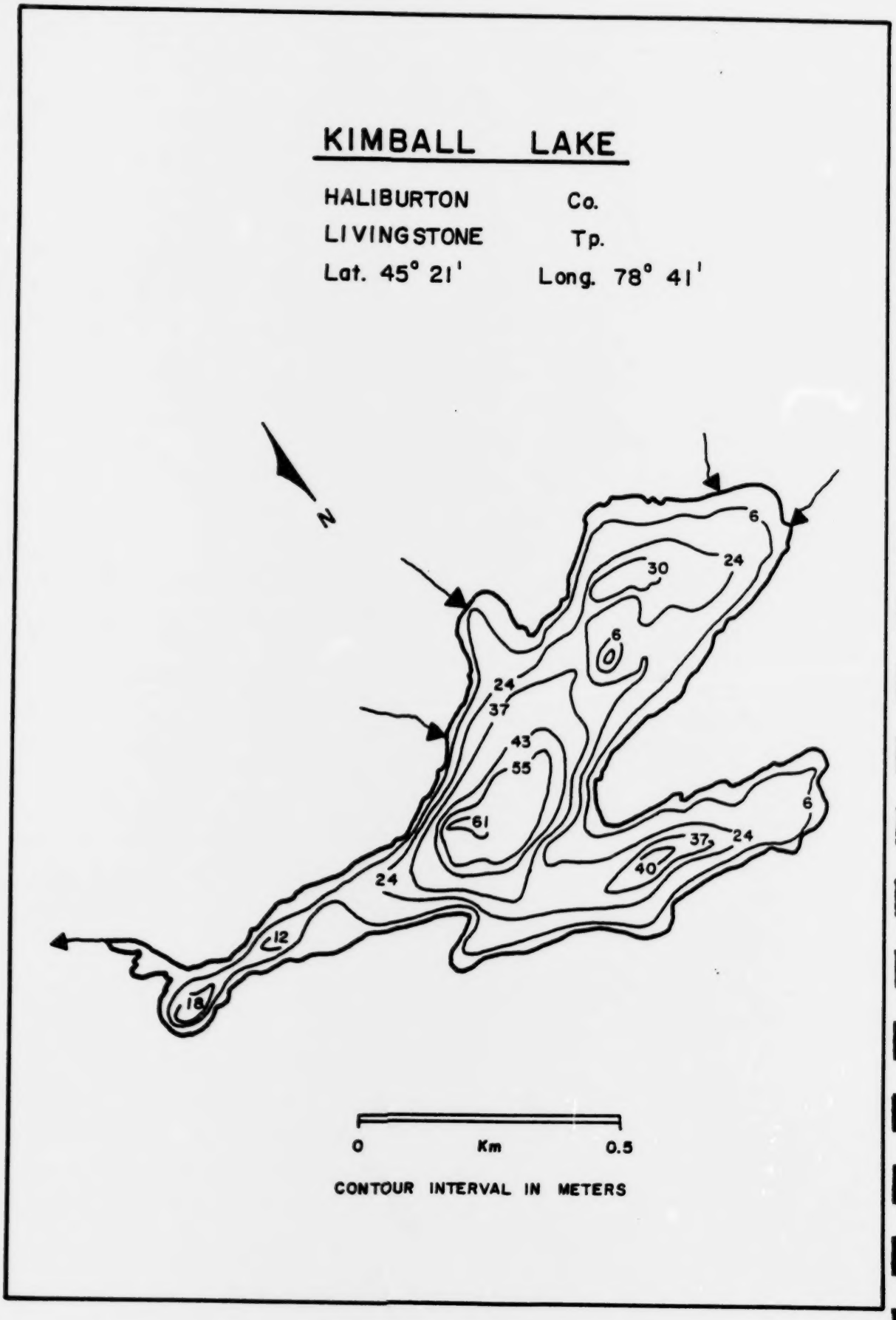

KIMBALL LAKE
HALIBURTON Co.
LIVINGSTONE Tp.
Lat. 45° 21' Long. 78° 41'
N
6
24
30
6
24
37
43
55
61
6
37
24
40
24
12
18
0
Km
0.5
CONTOUR INTERVAL IN METERS

Table 10

KIMBALL LAKE

| Contour Depth (m) | Contour Area (ha) | Stratum Volume ($m^3 \times 10^5$) |
|---|---|---|
| 0 | 213. | |
| | | 40.8 |
| 2 | 196. | |
| | | 37.5 |
| 4 | 179. | |
| | | 34.3 |
| 6 | 164. | |
| | | 31.7 |
| 8 | 154. | |
| | | 29.8 |
| 10 | 144. | |
| | | 27.9 |
| 12 | 135. | |
| | | 26.0 |
| 14 | 126. | |
| | | 24.3 |
| 16 | 117. | |
| | | 22.6 |
| 18 | 109. | |
| | | 20.9 |
| 20 | 101. | |
| | | 19.4 |
| 22 | 92.9 | |
| | | 17.8 |
| 24 | 85.5 | |
| | | 16.2 |
| 26 | 76.4 | |
| | | 14.4 |
| 28 | 67.8 | |
| | | 12.7 |
| 30 | 59.7 | |
| | | 11.2 |
| 32 | 52.1 | |
| | | 9.71 |
| 34 | 45.1 | |
| | | 8.35 |
| 36 | 38.5 | |
| | | 7.10 |
| 38 | 32.5 | |
| | | 5.94 |
| 40 | 27.0 | |
| | | 4.89 |
| 42 | 22.0 | |
| | | 4.10 |
| 44 | 19.0 | |
| | | 3.67 |
| 46 | 17.7 | |
| | | 3.42 |
| 48 | 16.5 | |
| | | 3.18 |
| 50 | 15.3 | |
| | | 2.94 |
| 52 | 14.1 | |
| | | 2.71 |
| 54 | 13.0 | |
| | | 2.25 |
| 56 | 9.59 | |
| | | 1.43 |
| 58 | 4.96 | |
| | | 0.654 |
| 61 | 1.84 | |

Figure 8

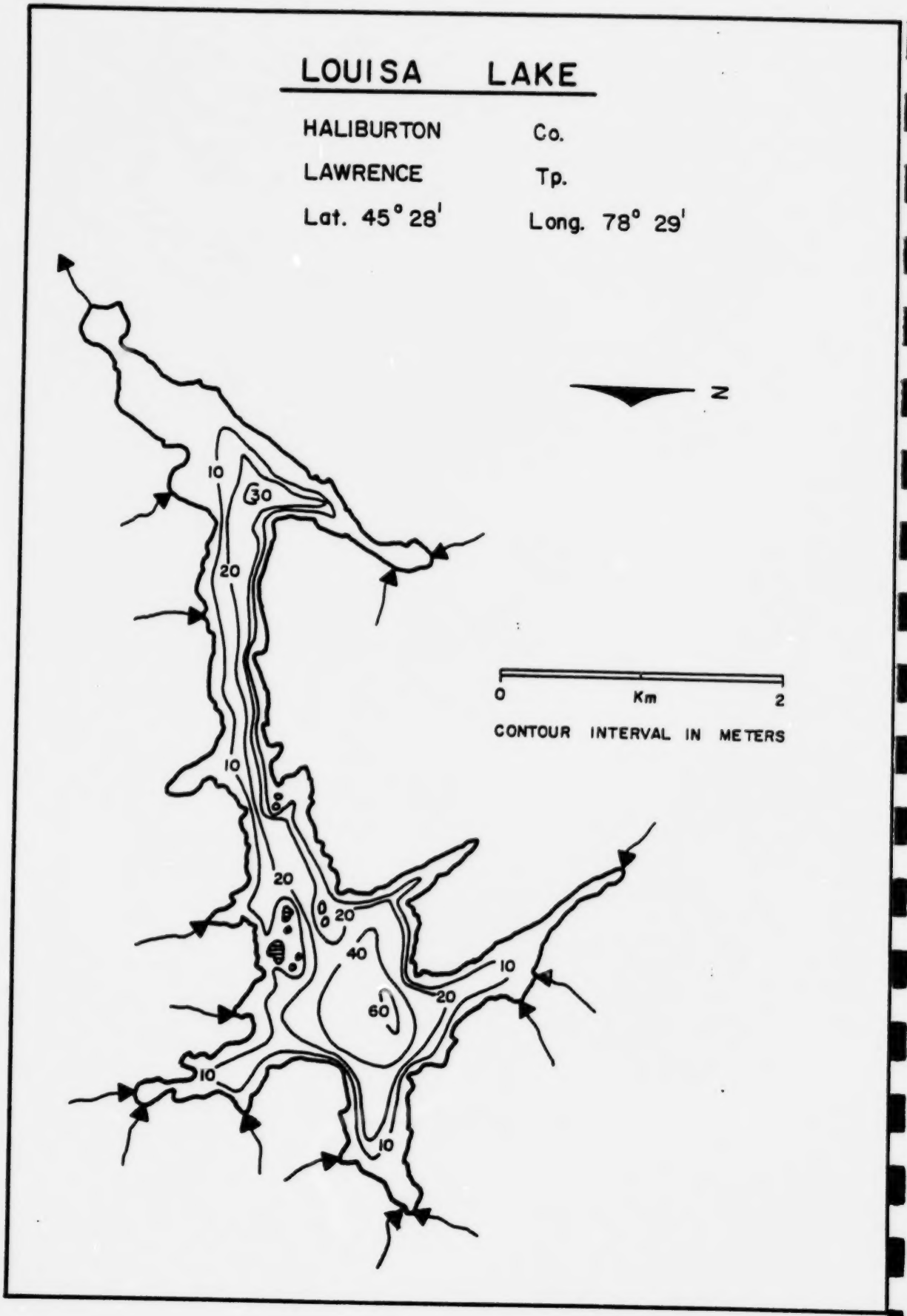

LOUISA LAKE
HALIBURTON Co.
LAWRENCE Tp.
Lat. 45° 28'
Long. 78° 29'
N
10
30
20
10
20
0
20
40
60
10
20
10
10
0
Km
2
CONTOUR INTERVAL IN METERS

Table 11

LAKE LOUISA

| Contour Depth (m) | Contour Area (ha) | Stratum Volume ($m^3 x 10^5$) |
|---|---|---|
| 0 | 531. | |
| | | 100. |
| 2 | 469. | |
| | | 89.0 |
| 4 | 422. | |
| | | 79.4 |
| 6 | 372. | |
| | | 69.5 |
| 8 | 324. | |
| | | 60.9 |
| 10 | 285. | |
| | | 53.9 |
| 12 | 254. | |
| | | 48.6 |
| 14 | 232. | |
| | | 44.1 |
| 16 | 210. | |
| | | 39.8 |
| 18 | 188. | |
| | | 35.5 |
| 20 | 167. | |
| | | 31.4 |
| 22 | 146. | |
| | | 27.3 |
| 24 | 127. | |
| | | 23.6 |
| 26 | 109. | |
| | | 20.1 |
| 28 | 92.6 | |
| | | 17.0 |
| 30 | 77.6 | |
| | | 14.9 |
| 32 | 71.5 | |
| | | 13.7 |
| 34 | 65.7 | |
| | | 12.6 |
| 36 | 60.1 | |
| | | 11.5 |
| 38 | 54.8 | |
| | | 10.4 |
| 40 | 49.7 | |
| | | 9.39 |
| 42 | 44.3 | |
| | | 8.34 |
| 44 | 39.2 | |
| | | 7.39 |
| 46 | 34.7 | |
| | | 6.55 |
| 48 | 30.9 | |
| | | 5.80 |
| 50 | 27.2 | |
| | | 4.91 |
| 52 | 22.0 | |
| | | 3.94 |
| 54 | 17.4 | |
| | | 2.99 |
| 56 | 12.6 | |
| | | 2.04 |
| 58 | 7.97 | |
| | | 1.22 |
| 61 | 4.39 | |

Figure 9

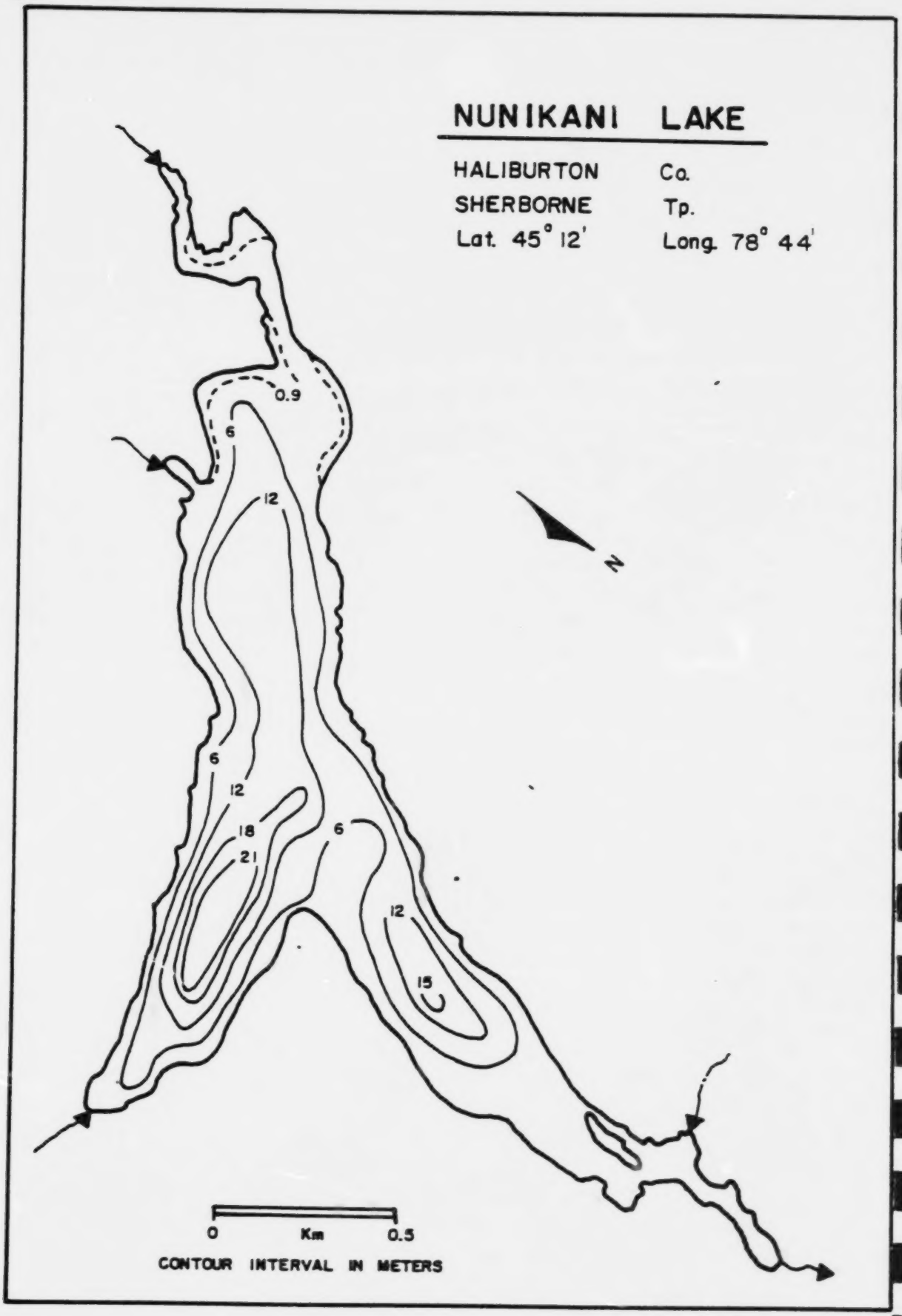

NUNIKANI LAKE
HALIBURTON Co.
SHERBORNE Tp.
Lat. 45° 12' Long. 78° 44'
0.9
6
12
6
12
18
21
6
12
15
N
0 Km 0.5
CONTOUR INTERVAL IN METERS

Table 12

NUNIKANI (CRAB) LAKE

| Contour Depth (m) | Contour Area (ha) | Stratum Volume ($m^3 x 10^5$) |
|---|---|---|
| 0 | 116. | |
| | | 20.6 |
| 2 | 90.9 | |
| | | 16.3 |
| 4 | 72.0 | |
| | | 12.7 |
| 6 | 55.3 | |
| | | 10.5 |
| 8 | 49.8 | |
| | | 9.23 |
| 10 | 42.5 | |
| | | 7.46 |
| 12 | 32.3 | |
| | | 5.64 |
| 14 | 24.3 | |
| | | 4.02 |
| 16 | 16.2 | |
| | | 2.37 |
| 18 | 7.98 | |
| | | 1.28 |
| 20 | 4.93 | |
| | | 0.680 |
| 22 | 2.07 | |
| | | 0.138 |
| 24 | 0.000 | |

Figure 10

SHERBORNE LAKE
HALIBURTON Co.
SHERBORNE and STANHOPE Tps.
Lat. 45° 11'
Long. 78° 47'
N
6
6
6
12
24
30
18
6
12
18
6
24
12
12
12
12
30
6
6
12
18
24
0 Km 0.5
CONTOUR INTERVAL IN METERS

Table 13

SHERBORNE (TROUT) LAKE

| Contour Depth (m) | Contour Area (ha) | Stratum Volume ($m^3 x 10^5$) |
|---|---|---|
| 0 | 252. | |
| | | 45.8 |
| 2 | 207. | |
| | | 37.7 |
| 4 | 171. | |
| | | 31.0 |
| 6 | 140. | |
| | | 25.9 |
| 8 | 119. | |
| | | 21.8 |
| 10 | 99.2 | |
| | | 18.0 |
| 12 | 81.5 | |
| | | 14.7 |
| 14 | 65.7 | |
| | | 11.7 |
| 16 | 51.6 | |
| | | 9.05 |
| 18 | 39.2 | |
| | | 7.05 |
| 20 | 31.5 | |
| | | 5.64 |
| 22 | 25.0 | |
| | | 4.43 |
| 24 | 19.4 | |
| | | 3.24 |
| 26 | 13.3 | |
| | | 2.11 |
| 28 | 8.07 | |
| | | 1.20 |
| 30 | 4.18 | |
| | | 0.549 |
| 32 | 1.53 | |
| | | 0.149 |
| 34 | 0.182 | |
| | | 0.006 |
| 35.1 | 0.000 | |

Figure 11

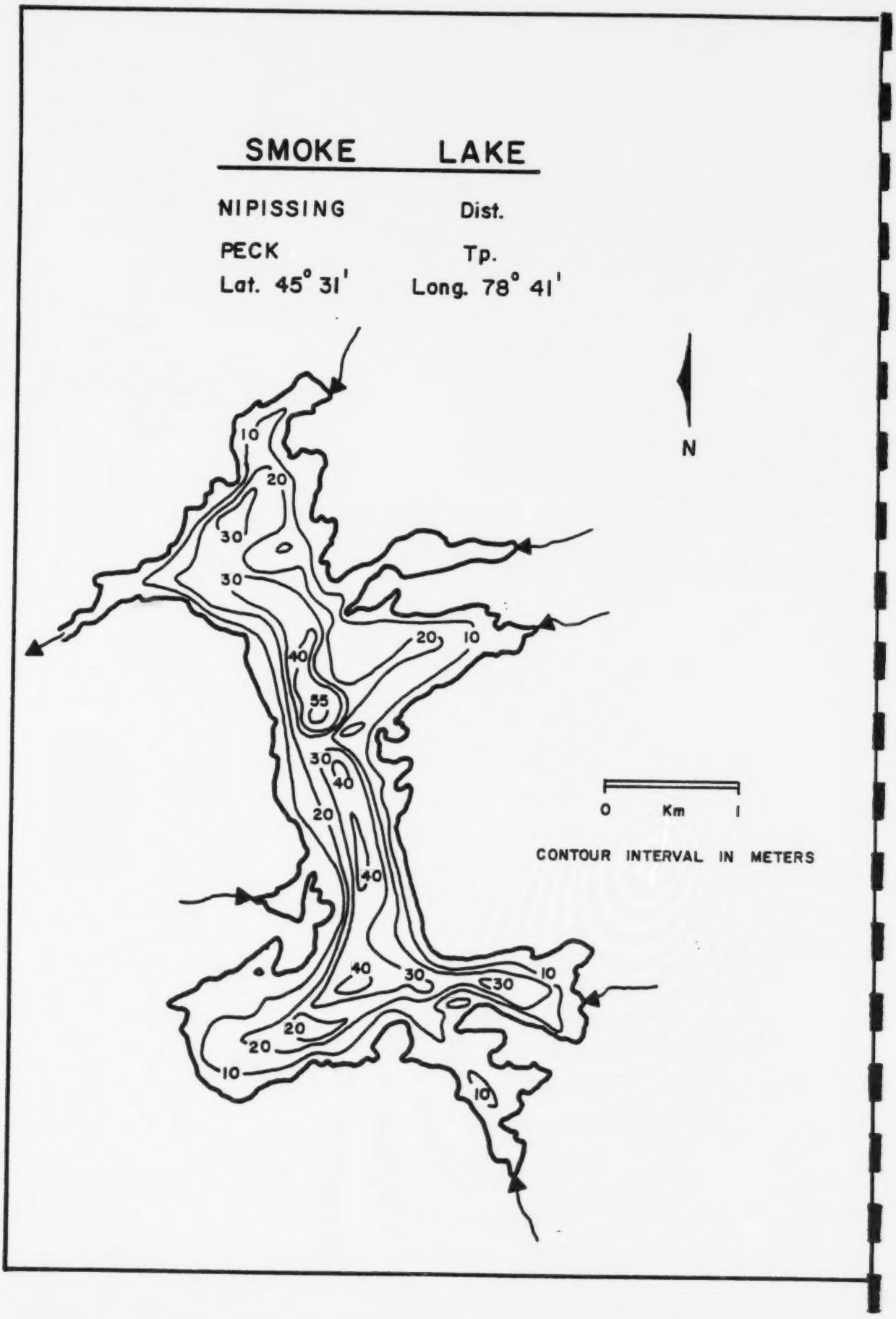

SMOKE LAKE
NIPISSING Dist.
PECK Tp.
Lat. 45° 31' Long. 78° 41'
N
10
20
30
30
40
35
30
40
20
40
40
30
30
10
20
20
10
10
20
10
0 Km 1
CONTOUR INTERVAL IN METERS

Table 14

SMOKE LAKE

| Contour Depth (m) | Contour Area (ha) | Stratum Volume ($m^3 x 10^5$) |
|---|---|---|
| 0 | 679. | |
| | | 128. |
| 2 | 598. | |
| | | 115. |
| 4 | 551. | |
| | | 106. |
| 6 | 513. | |
| | | 98.2 |
| 8 | 470. | |
| | | 88.3 |
| 10 | 414. | |
| | | 78.3 |
| 12 | 370. | |
| | | 70.9 |
| 14 | 340. | |
| | | 65.1 |
| 16 | 311. | |
| | | 58.7 |
| 18 | 276. | |
| | | 51.8 |
| 20 | 243. | |
| | | 45.3 |
| 22 | 211. | |
| | | 39.1 |
| 24 | 180. | |
| | | 33.4 |
| 26 | 154. | |
| | | 28.5 |
| 28 | 131. | |
| | | 24.0 |
| 30 | 110. | |
| | | 19.5 |
| 32 | 85.5 | |
| | | 14.9 |
| 34 | 64.4 | |
| | | 11.1 |
| 36 | 47.1 | |
| | | 8.00 |
| 38 | 33.3 | |
| | | 5.48 |
| 40 | 21.9 | |
| | | 3.71 |
| 42 | 15.4 | |
| | | 2.53 |
| 44 | 10.1 | |
| | | 1.61 |
| 46 | 6.19 | |
| | | 0.958 |
| 48 | 3.52 | |
| | | 0.500 |
| 50 | 1.60 | |
| | | 0.267 |
| 52 | 1.09 | |
| | | 0.174 |
| 55 | 0.670 | |

Figure 12

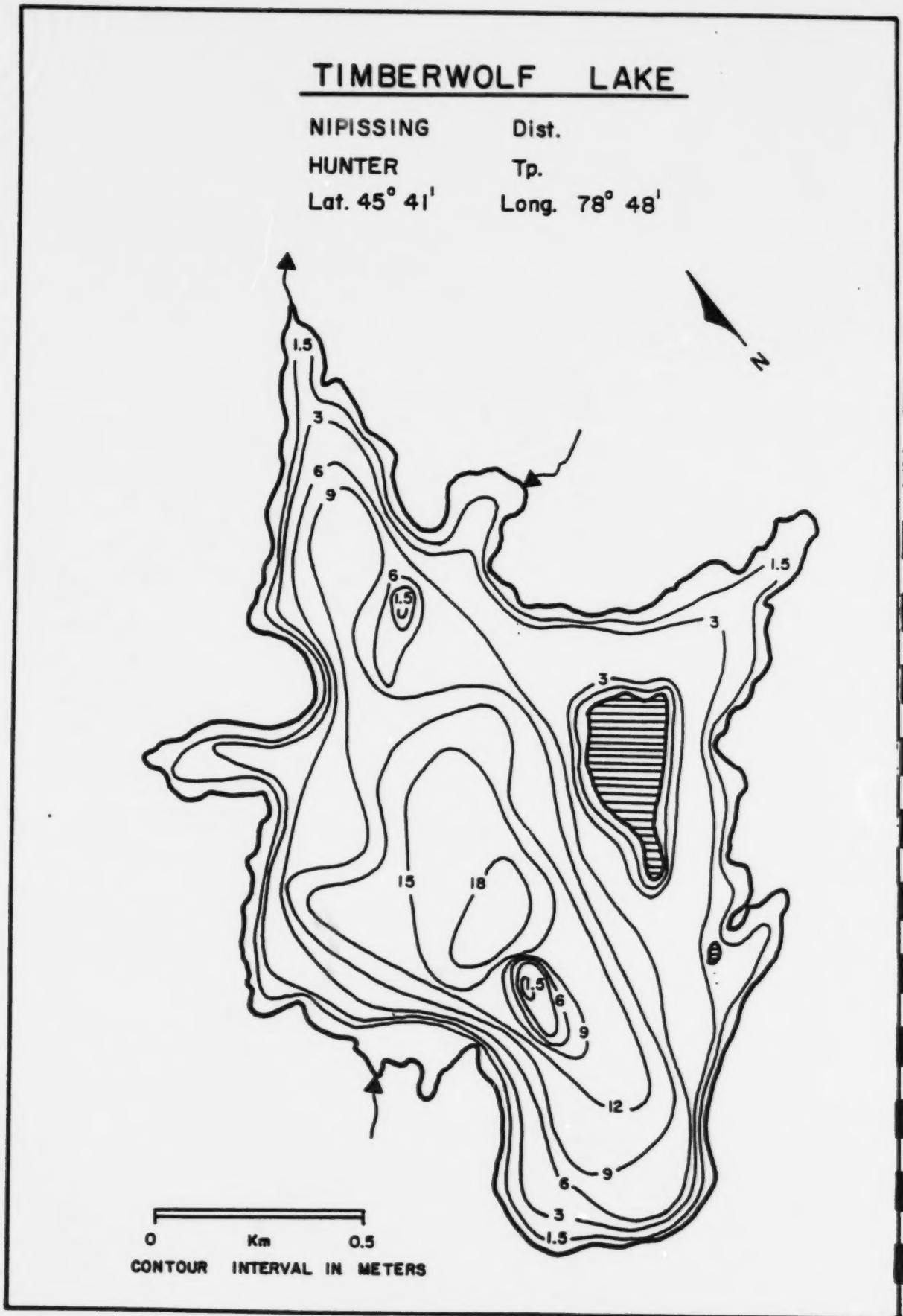

TIMBERWOLF LAKE
NIPISSING Dist.
HUNTER Tp.
Lat. 45° 41' Long. 78° 48'
N
1.5
3
6
9
6
1.5
1.5
3
3
15
18
1.5
6
9
12
9
6
3
1.5
0 Km 0.5
CONTOUR INTERVAL IN METERS

Table 15

TIMBERWOLF LAKE

| Contour Depth (m) | Contour Area (ha) | Stratum Volume ($m^3 x 10^5$) |
|---|---|---|
| 0 | 167. | |
| | | 30.8 |
| 2 | 141. | |
| | | 25.6 |
| 4 | 116. | |
| | | 20.4 |
| 6 | 88.8 | |
| | | 15.7 |
| 8 | 68.7 | |
| | | 11.9 |
| 10 | 50.7 | |
| | | 8.55 |
| 12 | 35.3 | |
| | | 5.77 |
| 14 | 22.9 | |
| | | 3.23 |
| 16 | 10.3 | |
| | | 1.50 |
| 18 | 5.09 | |
| | | 0.549 |
| 20 | 0.950 | |
| | | 0.013 |
| 20.4 | 0.000 | |

Figure 13

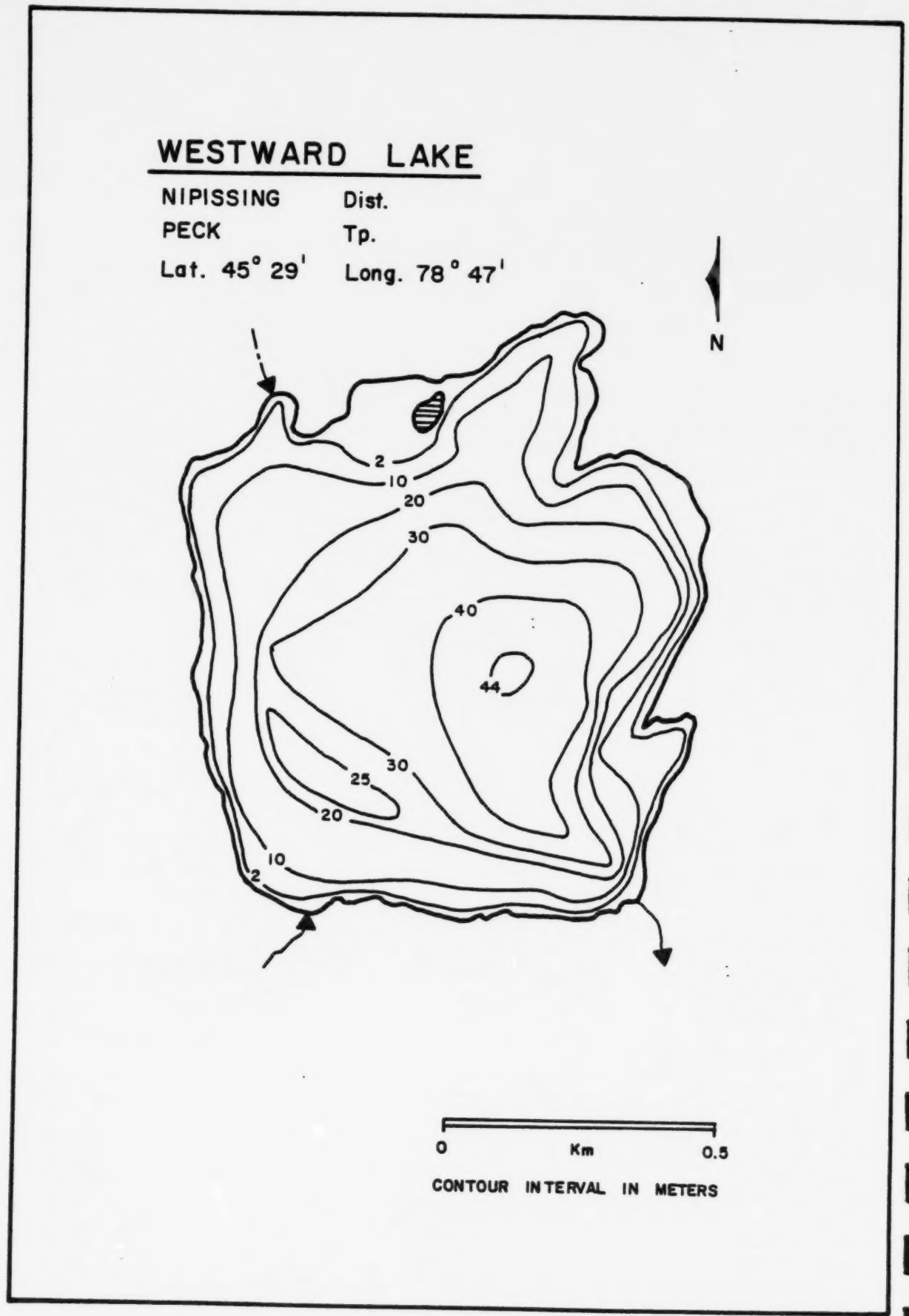

WESTWARD LAKE
NIPISSING Dist.
PECK Tp.
Lat. 45° 29' Long. 78° 47'
N
2
10
20
30
40
44
30
25
20
10
2
0 Km 0.5
CONTOUR INTERVAL IN METERS

Table 16

WESTWARD LAKE

| Contour Depth (m) | Contour Area (ha) | Stratum Volume ($m^3 x 10^5$) |
|---|---|---|
| 0 | 63.3 | |
| | | 12.1 |
| 2 | 58.4 | |
| | | 11.3 |
| 4 | 55.0 | |
| | | 10.8 |
| 6 | 53.1 | |
| | | 10.3 |
| 8 | 49.7 | |
| | | 9.57 |
| 10 | 46.1 | |
| | | 8.65 |
| 12 | 40.5 | |
| | | 14.9 |
| 16 | 34.0 | |
| | | 12.9 |
| 20 | 30.6 | |
| | | 13.8 |
| 25 | 24.8 | |
| | | 10.9 |
| 30 | 18.8 | |
| | | 7.97 |
| 35 | 13.2 | |
| | | 5.04 |
| 40 | 7.22 | |
| | | 1.24 |
| 44 | 0.383 | |

BIG PORCUPINE

Calculation date: 84/07/16

1983->84

| | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|
| START | 830425 | 830521 | 830521 | 830521 | 830521 | 831101 | | 830425 | |
| END | 830520 | 831031 | 831031 | 831031 | 831031 | 831118 | | 831118 | |

ALKTI Alkalinity, TIA as CaCO3 mg/L

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 0.84 | 0.914 | 1.45 | 1.49 | 1.23 | | | 1.17 | |
| MIN | I | 0.84 | 0.78 | 0.95 | 0.95 | 0.917 | | | 0.84 | |
| MAX | I | 0.84 | 1.04 | 2.67 | 2.18 | 1.93 | | | 1.93 | |
| N | I | 1.00 | 5.00 | 5.00 | 5.00 | 5.00 | | | 6.00 | |

ALUT Aluminum ug/L

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 7.00 | 50.5 | 20.5 | 28.5 | 43.4 | | | 36.1 | |
| MIN | I | 7.00 | 2.00 | 10.0 | 25.0 | 5.83 | | | 5.83 | |
| MAX | I | 7.00 | 201. | 27.0 | 33.0 | 128. | | | 128. | |
| N | I | 1.00 | 4.00 | 4.00 | 4.00 | 4.00 | | | 5.00 | |

CAUR Calcium mg/L

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 2.40 | 2.14 | 2.12 | 2.20 | 2.13 | | | 2.18 | |
| MIN | I | 2.40 | 1.90 | 1.80 | 2.00 | 1.96 | | | 1.96 | |
| MAX | I | 2.40 | 2.30 | 2.30 | 2.40 | 2.30 | | | 2.40 | |
| N | I | 1.00 | 5.00 | 5.00 | 5.00 | 5.00 | | | 6.00 | |

CLIDUR Chloride mg/L

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 0.30 | 0.276 | 0.262 | 0.29 | 0.273 | | | 0.278 | |
| MIN | I | 0.30 | 0.26 | 0.25 | 0.23 | 0.267 | | | 0.267 | |
| MAX | I | 0.30 | 0.29 | 0.27 | 0.31 | 0.281 | | | 0.30 | |
| N | I | 1.00 | 5.00 | 5.00 | 5.00 | 5.00 | | | 6.00 | |

COLTR Colour (true)

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 7.00 | 5.80 | 7.40 | 14.8 | 6.97 | | | 6.98 | |
| MIN | I | 7.00 | 2.00 | 4.00 | 9.00 | 4.41 | | | 4.41 | |
| MAX | I | 7.00 | 8.00 | 10.0 | 34.0 | 8.86 | | | 8.86 | |
| N | I | 1.00 | 5.00 | 5.00 | 5.00 | 5.00 | | | 6.00 | |

COND25 Conductivity (25 C)

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 26.0 | 25.4 | 26.0 | 26.7 | 25.7 | | | 25.8 | |
| MIN | I | 26.0 | 25.0 | 25.0 | 26.0 | 25.2 | | | 25.2 | |
| MAX | I | 26.0 | 26.2 | 26.9 | 27.3 | 26.5 | | | 26.5 | |
| N | I | 1.00 | 5.00 | 5.00 | 5.00 | 5.00 | | | 6.00 | |

BIG PORCUPINE
1983->84

CALCULATION DATE: 84/07/16

DIC Dissolved Inorganic Carbon mg/L

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 0.64 | 0.35 | 0.760 | 1.74 | 0.595 | | | 0.603 | |
| MIN | I | 0.64 | 0.28 | 0.53 | 1.04 | 0.504 | | | 0.504 | |
| MAX | I | 0.64 | 0.40 | 1.17 | 2.40 | 0.718 | | | 0.718 | |
| N | I | 1.00 | 5.00 | 5.00 | 5.00 | 5.00 | | | 6.00 | |

DOC Dissolved Organic Carbon mg/L

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 2.00 | 2.06 | 1.94 | 1.86 | 2.00 | | | 2.00 | |
| MIN | I | 2.00 | 1.90 | 1.80 | 1.70 | 1.89 | | | 1.89 | |
| MAX | I | 2.00 | 2.30 | 2.10 | 2.10 | 2.24 | | | 2.24 | |
| N | I | 1.00 | 5.00 | 5.00 | 5.00 | 5.00 | | | 6.00 | |

FEUT Iron ug/L

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 120. | 27.0 | 125. | 346. | 84.8 | | | 98.7 | |
| MIN | I | 120. | 15.0 | 15.0 | 60.0 | 26.0 | | | 26.0 | |
| MAX | I | 120. | 40.0 | 470. | 965. | 211. | | | 211. | |
| N | I | 1.00 | 5.00 | 5.00 | 5.00 | 5.00 | | | 6.00 | |

FFIDUR Fluoride ug/L

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | | 45.1 | 43.5 | 44.1 | 44.4 | | | 44.4 | |
| MIN | I | | 43.5 | 42.0 | 41.9 | 42.5 | | | 42.5 | |
| MAX | I | | 48.0 | 46.0 | 47.1 | 47.1 | | | 47.1 | |
| N | I | | 4.00 | 4.00 | 4.00 | 4.00 | | | 4.00 | |

KKUR Potassium mg/L

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 0.42 | 0.372 | 0.368 | 0.38 | 0.371 | | | 0.379 | |
| MIN | I | 0.42 | 0.34 | 0.34 | 0.36 | 0.342 | | | 0.342 | |
| MAX | I | 0.42 | 0.38 | 0.38 | 0.40 | 0.38 | | | 0.42 | |
| N | I | 1.00 | 5.00 | 5.00 | 5.00 | 5.00 | | | 6.00 | |

MGUR Magnesium mg/L

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 0.54 | 0.564 | 0.548 | 0.556 | 0.556 | | | 0.553 | |
| MIN | I | 0.54 | 0.52 | 0.52 | 0.52 | 0.52 | | | 0.52 | |
| MAX | I | 0.54 | 0.60 | 0.58 | 0.58 | 0.591 | | | 0.591 | |
| N | I | 1.00 | 5.00 | 5.00 | 5.00 | 5.00 | | | 6.00 | |

MNUT Manganese ug/L

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 38.0 | 21.8 | 88.0 | 144. | 52.2 | | | 49.8 | |
| MIN | I | 38.0 | 8.00 | 21.0 | 59.0 | 21.6 | | | 21.6 | |
| MAX | I | 38.0 | 41.0 | 220. | 270. | 101. | | | 101. | |
| N | I | 1.00 | 5.00 | 5.00 | 5.00 | 5.00 | | | 6.00 | |

Table 17 con't

BIG PORCUPINE
1983->84

CALCULATION DATE: 84/07/16

NAUR Sodium mg/L

| | | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 0.65 | 0.54 | 0.52 | 0.53 | 0.531 | | | 0.551 | |
| MIN | I | 0.65 | 0.50 | 0.45 | 0.50 | 0.47 | | | 0.47 | |
| MAX | I | 0.65 | 0.60 | 0.60 | 0.55 | 0.599 | | | 0.65 | |
| N | I | 1.00 | 5.00 | 5.00 | 5.00 | 5.00 | | | 6.00 | |

NNHTFR Ammonium as N ug/L DETECTION LIMIT USED:1

| | | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 11.0 | 3.40L | 11.6 | 30.6 | 8.95L | | | 9.29L | |
| MIN | I | 11.0 | 1.00 | 4.00 | 10.0 | 5.45 | | | 5.45 | |
| MAX | I | 11.0 | 10.0 | 18.0 | 58.0 | 12.7 | | | 12.7 | |
| N | I | 1.00 | 5.00 | 5.00 | 5.00 | 5.00 | | | 6.00 | |

NNOTFR Nitrate and Nitrite as N ug/L DETECTION LIMIT USED:2

| | | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 96.0 | 19.4L | 55.0 | 113. | 39.2L | | | 48.7L | |
| MIN | I | 96.0 | 2.00 | 33.0 | 33.0 | 15.4 | | | 15.4 | |
| MAX | I | 96.0 | 59.0 | 72.0 | 220. | 72.4 | | | 96.0 | |
| N | I | 1.00 | 5.00 | 5.00 | 5.00 | 5.00 | | | 6.00 | |

NNTKUR Total Kjeldahl Nitrogen ug/L

| | | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 140. | 144. | 151. | 175. | 150. | | | 148. | |
| MIN | I | 140. | 135. | 140. | 155. | 141. | | | 140. | |
| MAX | I | 140. | 160. | 180. | 190. | 169. | | | 169. | |
| N | I | 1.00 | 5.00 | 5.00 | 5.00 | 5.00 | | | 6.00 | |

PH pH (-LOG(Hydrogen conc'n))

| | | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 5.94 | 6.24 | 5.97 | 5.75 | 6.11 | | | 6.08 | |
| MIN | I | 5.94 | 6.04 | 5.85 | 5.66 | 5.96 | | | 5.94 | |
| MAX | I | 5.94 | 6.35 | 6.01 | 5.82 | 6.20 | | | 6.20 | |
| N | I | 1.00 | 5.00 | 5.00 | 5.00 | 5.00 | | | 6.00 | |

PPUT Total Phosphorous ug/L

| | | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 6.83 | 3.15 | 4.91 | 6.33 | 4.28 | | | 4.70 | |
| MIN | I | 6.83 | 2.70 | 3.87 | 5.15 | 3.29 | | | 3.29 | |
| MAX | I | 6.83 | 3.60 | 7.77 | 7.57 | 6.46 | | | 6.83 | |
| N | I | 1.00 | 5.00 | 5.00 | 5.00 | 5.00 | | | 6.00 | |

SIO3UR Silicates mg/L

| | | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 0.97 | 0.79 | 0.962 | 1.25 | 0.882 | | | 0.897 | |
| MIN | I | 0.97 | 0.60 | 0.79 | 1.01 | 0.705 | | | 0.705 | |
| MAX | I | 0.97 | 0.92 | 1.42 | 1.54 | 0.993 | | | 0.993 | |
| N | I | 1.00 | 5.00 | 5.00 | 5.00 | 5.00 | | | 6.00 | |

Table 17 con't

BIG PORCUPINE
1983->84

CALCULATION DATE: 84/07/16

SSO4UR Sulphate as SO4 mg/L

| | I I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-) MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 7.56 | 7.49 | 7.38 | 7.14 | 7.40 | | | 7.42 | |
| MIN | I | 7.56 | 7.39 | 6.78 | 6.65 | 7.13 | | | 7.13 | |
| MAX | I | 7.56 | 7.58 | 7.56 | 7.60 | 7.57 | | | 7.57 | |
| N | I | 1.00 | 5.00 | 5.00 | 5.00 | 5.00 | | | 6.00 | |

Table 17 con't

BONNECHERE

Calculation date: 84/07/16

1983-)84

| | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-) MAY 31 |
|---|---|---|---|---|---|---|---|---|---|
| START | 830425 | 830521 | 830521 | 830521 | 830521 | 831101 | | 830425 | |
| END | 830520 | 831031 | 831031 | 831031 | 831031 | 831110 | | 831110 | |

ALKTI Alkalinity, TIA as CaCO3 mg/L

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-) MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 0.406 | 0.36 | 0.71 | 1.14 | 0.524 | | | 0.504 | |
| MIN | I | 0.406 | 0.29 | 0.46 | 0.58 | 0.425 | | | 0.406 | |
| MAX | I | 0.406 | 0.42 | 1.05 | 2.67 | 0.651 | | | 0.651 | |
| N | I | 1.00 | 5.00 | 5.00 | 5.00 | 5.00 | | | 6.00 | |

ALUT Aluminum ug/L

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-) MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 111. | 48.8 | 82.5 | 107. | 65.3 | | | 74.4 | |
| MIN | I | 111. | 24.0 | 68.0 | 102. | 47.4 | | | 47.4 | |
| MAX | I | 111. | 85.0 | 96.0 | 114. | 84.6 | | | 111. | |
| N | I | 1.00 | 4.00 | 4.00 | 4.00 | 4.00 | | | 5.00 | |

CAUR Calcium mg/L

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-) MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 2.44 | 2.20 | 2.24 | 2.34 | 2.22 | | | 2.26 | |
| MIN | I | 2.44 | 2.10 | 2.20 | 2.20 | 2.13 | | | 2.13 | |
| MAX | I | 2.44 | 2.30 | 2.30 | 2.50 | 2.31 | | | 2.44 | |
| N | I | 1.00 | 5.00 | 5.00 | 5.00 | 5.00 | | | 6.00 | |

CLIDUR Chloride mg/L

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-) MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 0.285 | 0.262 | 0.29 | 0.266 | 0.273 | | | 0.275 | |
| MIN | I | 0.285 | 0.23 | 0.31 | 0.20 | 0.251 | | | 0.251 | |
| MAX | I | 0.285 | 0.29 | 0.38 | 0.38 | 0.329 | | | 0.329 | |
| N | I | 1.00 | 5.00 | 5.00 | 5.00 | 5.00 | | | 6.00 | |

COLTR Colour (true)

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-) MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 14.3 | 10.6 | 18.8 | 32.4 | 14.5 | | | 14.4 | |
| MIN | I | 14.3 | 9.00 | 15.0 | 20.0 | 13.0 | | | 13.0 | |
| MAX | I | 14.3 | 13.0 | 25.0 | 50.0 | 15.6 | | | 15.6 | |
| N | I | 1.00 | 5.00 | 5.00 | 5.00 | 5.00 | | | 6.00 | |

COND25 Conductivity (25 C)

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-) MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 26.2 | 26.0 | 26.6 | 28.3 | 26.3 | | | 26.3 | |
| MIN | I | 26.2 | 26.0 | 26.0 | 28.0 | 26.1 | | | 26.1 | |
| MAX | I | 26.2 | 26.1 | 27.1 | 29.0 | 26.6 | | | 26.6 | |
| N | I | 1.00 | 5.00 | 5.00 | 5.00 | 5.00 | | | 6.00 | |

Table 18 Bonnechere Lake

BONNECHERE
1983-)84

CALCULATION DATE: 84/07/16

DIC Dissolved Inorganic Carbon mg/L

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-) MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 0.762 | 0.26 | 1.13 | 2.11 | 0.653 | | | 0.671 | |
| MIN | I | 0.762 | 0.19 | 0.63 | 1.48 | 0.546 | | | 0.546 | |
| MAX | I | 0.762 | 0.34 | 2.13 | 3.06 | 0.827 | | | 0.827 | |
| N | I | 1.00 | 5.00 | 5.00 | 5.00 | 5.00 | | | 6.00 | |

DOC Dissolved Organic Carbon mg/L

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-) MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 3.12 | 3.04 | 3.08 | 3.08 | 3.06 | | | 3.07 | |
| MIN | I | 3.12 | 2.90 | 3.00 | 2.90 | 2.95 | | | 2.95 | |
| MAX | I | 3.12 | 3.20 | 3.20 | 3.40 | 3.19 | | | 3.19 | |
| N | I | 1.00 | 5.00 | 5.00 | 5.00 | 5.00 | | | 6.00 | |

FEUT Iron ug/L

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-) MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 128. | 30.0 | 147. | 634. | 94.3 | | | 100. | |
| MIN | I | 128. | 15.0 | 65.0 | 240. | 57.1 | | | 57.1 | |
| MAX | I | 128. | 50.0 | 400. | 1500. | 191. | | | 191. | |
| N | I | 1.00 | 5.00 | 5.00 | 5.00 | 5.00 | | | 6.00 | |

FFIDUR Fluoride ug/L

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-) MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | | 45.5 | 44.3 | 44.0 | 45.0 | | | 45.0 | |
| MIN | I | | 43.0 | 42.5 | 43.6 | 43.7 | | | 43.7 | |
| MAX | I | | 46.0 | 46.2 | 46.0 | 46.4 | | | 46.4 | |
| N | I | | 4.00 | 4.00 | 4.00 | 4.00 | | | 4.00 | |

KKUR Potassium mg/L

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-) MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 0.439 | 0.392 | 0.40 | 0.396 | 0.396 | | | 0.404 | |
| MIN | I | 0.439 | 0.36 | 0.38 | 0.38 | 0.371 | | | 0.371 | |
| MAX | I | 0.439 | 0.42 | 0.42 | 0.42 | 0.415 | | | 0.439 | |
| N | I | 1.00 | 5.00 | 5.00 | 5.00 | 5.00 | | | 6.00 | |

MGUR Magnesium mg/L

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-) MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 0.514 | 0.544 | 0.552 | 0.552 | 0.55 | | | 0.544 | |
| MIN | I | 0.514 | 0.52 | 0.50 | 0.50 | 0.515 | | | 0.514 | |
| MAX | I | 0.514 | 0.56 | 0.58 | 0.60 | 0.571 | | | 0.571 | |
| N | I | 1.00 | 5.00 | 5.00 | 5.00 | 5.00 | | | 6.00 | |

MNUT Manganese ug/L

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-) MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 33.3 | 26.6 | 42.8 | 54.0 | 33.8 | | | 33.7 | |
| MIN | I | 33.3 | 24.0 | 36.0 | 47.0 | 32.5 | | | 32.5 | |
| MAX | I | 33.3 | 29.0 | 56.0 | 67.0 | 34.0 | | | 34.0 | |
| N | I | 1.00 | 5.00 | 5.00 | 5.00 | 5.00 | | | 6.00 | |

Table 18 con't

BONNECHERE
1983-)84

CALCULATION DATE: 84/07/16

NAUR Sodium mg/L

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-) MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 0.55 | 0.45 | 0.44 | 0.46 | 0.446 | | | 0.463 | |
| MIN | I | 0.55 | 0.40 | 0.40 | 0.40 | 0.40 | | | 0.40 | |
| MAX | I | 0.55 | 0.50 | 0.50 | 0.55 | 0.502 | | | 0.55 | |
| N | I | 1.00 | 5.00 | 5.00 | 5.00 | 5.00 | | | 6.00 | |

NHHTFR Ammonium as N ug/L

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-) MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 31.0 | 3.20 | 14.0 | 63.4 | 10.9 | | | 14.3 | |
| MIN | I | 31.0 | 1.00 | 4.00 | 29.0 | 3.25 | | | 3.25 | |
| MAX | I | 31.0 | 9.00 | 25.0 | 80.0 | 15.4 | | | 31.0 | |
| N | I | 1.00 | 5.00 | 5.00 | 5.00 | 5.00 | | | 6.00 | |

NNOTFR Nitrate and Nitrite as N ug/L DETECTION LIMIT USED:2

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-) MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 70.2 | 11.2L | 48.2 | 99.2 | 29.0L | | | 37.2L | |
| MIN | I | 70.2 | 2.00 | 35.0 | 74.0 | 19.0 | | | 19.0 | |
| MAX | I | 70.2 | 45.0 | 70.0 | 142. | 55.0 | | | 70.2 | |
| N | I | 1.00 | 5.00 | 5.00 | 5.00 | 5.00 | | | 6.00 | |

NNTKUR Total Kjeldahl Nitrogen ug/L

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-) MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 190. | 182. | 180. | 249. | 185. | | | 187. | |
| MIN | I | 190. | 175. | 160. | 220. | 179. | | | 179. | |
| MAX | I | 190. | 205. | 195. | 280. | 192. | | | 198. | |
| N | I | 1.00 | 5.00 | 5.00 | 5.00 | 5.00 | | | 6.00 | |

PH pH [-LOG(Hydrogen conc'n)]

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-) MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 5.56 | 5.79 | 5.57 | 5.46 | 5.70 | | | 5.68 | |
| MIN | I | 5.56 | 5.52 | 5.48 | 5.31 | 5.51 | | | 5.51 | |
| MAX | I | 5.56 | 5.98 | 5.65 | 5.69 | 5.78 | | | 5.78 | |
| N | I | 1.00 | 5.00 | 5.00 | 5.00 | 5.00 | | | 6.00 | |

PPUT Total Phosphorous ug/L

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-) MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 6.66 | 3.81 | 5.93 | 10.1 | 4.91 | | | 5.21 | |
| MIN | I | 6.66 | 3.47 | 5.17 | 7.25 | 4.61 | | | 4.61 | |
| MAX | I | 6.66 | 4.20 | 7.17 | 14.8 | 5.33 | | | 6.66 | |
| N | I | 1.00 | 5.00 | 5.00 | 5.00 | 5.00 | | | 6.00 | |

SIO3UR Silicates mg/L

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-) MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 1.26 | 0.69 | 1.17 | 1.45 | 0.899 | | | 0.959 | |
| MIN | I | 1.26 | 0.51 | 1.12 | 1.13 | 0.741 | | | 0.741 | |
| MAX | I | 1.26 | 1.08 | 1.29 | 1.62 | 1.11 | | | 1.26 | |
| N | I | 1.00 | 5.00 | 5.00 | 5.00 | 5.00 | | | 6.00 | |

Table 18 con't

BONNECHERE
1983->84

CALCULATION DATE: 84/07/16

SSO4UR Sulphate as SO4 mg/L

| | I I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 0.10 | 7.60 | 7.57 | 7.03 | 7.65 | | | 7.73 | |
| MIN | I | 0.10 | 7.55 | 7.21 | 7.59 | 7.44 | | | 7.44 | |
| MAX | I | 0.10 | 7.84 | 7.82 | 7.96 | 7.82 | | | 8.10 | |
| N | I | 1.00 | 5.00 | 5.00 | 5.00 | 5.00 | | | 6.00 | |

Table 18 con't

CLEAR

Calculation date: 84/07/16

1978->79

| | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|
| START | | | | | | | 790101 | | |
| END | | | | | | | 790421 | | |

1979->80

| | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|
| START | 790422 | 790601 | 790601 | 790601 | 790601 | 791201 | | 790422 | 790601 |
| END | 790531 | 791130 | 791130 | 791130 | 791130 | 791213 | | 791213 | 800531 |

1980->81

| | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|
| START | 800425 | 800601 | 800601 | 800601 | 800601 | 801101 | 801113 | 800425 | 800601 |
| END | 800531 | 801031 | 801031 | 801031 | 801031 | 801112 | 810408 | 801112 | 810531 |

1981->82

| | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|
| START | 810409 | 810521 | 810521 | 810521 | 810521 | 811101 | | 810409 | 810601 |
| END | 810520 | 811031 | 811031 | 811031 | 811031 | 811123 | | 811123 | 820531 |

1982->83

| | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|
| START | 820427 | 820521 | 820521 | 820521 | 820521 | 821116 | | 820427 | 820601 |
| END | 820520 | 821115 | 821115 | 821115 | 821115 | 821213 | | 821213 | 830531 |

1983->84

| | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|
| START | 830428 | 830521 | 830521 | 830521 | 830521 | 831111 | | 830428 | |
| END | 830520 | 831110 | 831110 | 831110 | 831110 | 831118 | | 831118 | |

Table 19 Clear Lake

CLEAR — CALCULATION DATE: 84/07/16

ALKTI Alkalinity, TIA as CaCO3 mg/L

1980->81

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | | 0.214 | 0.764 | 1.35 | 0.521 | | 0.57 | 0.521 | 0.529 |
| MIN | I | | 0.01 | 0.29 | 0.82 | 0.248 | | 0.57 | 0.248 | 0.248 |
| MAX | I | | 0.42 | 1.15 | 2.86 | 0.75 | | 0.57 | 0.75 | 0.75 |
| N | I | | 5.00 | 5.00 | 5.00 | 5.00 | | 1.00 | 5.00 | 6.00 |

1981->82

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | | 0.398 | | | | 0.82 | | 0.82 | 0.694 |
| MIN | I | | 0.25 | | | | 0.82 | | 0.82 | 0.568 |
| MAX | I | | 0.65 | | | | 0.82 | | 0.82 | 0.82 |
| N | I | | 4.00 | | | | 1.00 | | 1.00 | 2.00 |

1982->83

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 0.568 | 0.276 | 0.734 | 1.46 | 0.564 | | | 0.565 | 0.545 |
| MIN | I | 0.568 | 0.25 | 0.48 | 0.67 | 0.533 | | | 0.533 | 0.448 |
| MAX | I | 0.568 | 0.32 | 1.20 | 2.24 | 0.598 | | | 0.598 | 0.598 |
| N | I | 1.00 | 5.00 | 5.00 | 5.00 | 5.00 | | | 6.00 | 6.00 |

1983->84

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 0.448 | 0.30 | 0.643 | 1.14 | 0.473 | | | 0.47 | |
| MIN | I | 0.448 | 0.24 | 0.38 | 0.54 | 0.425 | | | 0.425 | |
| MAX | I | 0.448 | 0.42 | 1.30 | 2.02 | 0.555 | | | 0.555 | |
| N | I | 1.00 | 4.00 | 4.00 | 4.00 | 4.00 | | | 7.00 | |

Table 19 con't

CLEAR
ALUT Aluminum ug/L

CALCULATION DATE: 84/07/16

1978->79

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | | | | | | | 49.0 | | |
| MIN | I | | | | | | | 34.0 | | |
| MAX | I | | | | | | | 64.0 | | |
| N | I | | | | | | | 2.00 | | |

1979->80

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | | 23.0 | | | | | | | |
| MIN | I | | 23.0 | | | | | | | |
| MAX | I | | 23.0 | | | | | | | |
| N | I | | 1.00 | | | | | | | |

1980->81

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | | | | | 27.5 | | | 27.5 | 27.5 |
| MIN | I | | | | | 20.0 | | | 20.0 | 20.0 |
| MAX | I | | | | | 35.0 | | | 35.0 | 35.0 |
| N | I | | | | | 2.00 | | | 2.00 | 2.00 |

1981->82

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | | | | | | 22.0 | | 22.0 | 30.0 |
| MIN | I | | | | | | 22.0 | | 22.0 | 22.0 |
| MAX | I | | | | | | 22.0 | | 22.0 | 38.0 |
| N | I | | | | | | 1.00 | | 1.00 | 2.00 |

1982->83

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 38.0 | 18.4 | 21.8 | 23.5 | 18.5 | | | 22.4 | 22.5 |
| MIN | I | 38.0 | 8.00 | 14.0 | 17.0 | 11.0 | | | 11.0 | 11.0 |
| MAX | I | 38.0 | 38.0 | 31.0 | 37.0 | 35.0 | | | 38.0 | 38.5 |
| N | I | 1.00 | 5.00 | 5.00 | 4.00 | 4.00 | | | 5.00 | 5.00 |

1983->84

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 38.5 | 16.2 | 28.5 | 30.0 | 21.8 | | | 24.2 | |
| MIN | I | 38.5 | 4.00 | 19.0 | 22.0 | 11.9 | | | 11.9 | |
| MAX | I | 38.5 | 38.0 | 38.0 | 42.0 | 30.5 | | | 38.5 | |
| N | I | 1.00 | 6.00 | 6.00 | 6.00 | 6.00 | | | 7.00 | |

Table 19 con't

CLEAR
CAUR Calcium mg/L

CALCULATION DATE: 84/07/16

1978->79

| | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|
| MEAN | | | | | | | 3.07 | | |
| MIN | | | | | | | 3.00 | | |
| MAX | | | | | | | 3.20 | | |
| N | | | | | | | 3.00 | | |

1979->80

| | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|
| MEAN | 2.70 | 2.60 | | | 2.50 | | | 2.60 | 2.50 |
| MIN | 2.60 | 2.60 | | | 2.40 | | | 2.40 | 2.40 |
| MAX | 2.80 | 2.60 | | | 2.60 | | | 2.80 | 2.60 |
| N | 2.00 | 2.00 | | | 2.00 | | | 4.00 | 2.00 |

1980->81

| | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|
| MEAN | | 2.48 | 2.68 | 2.64 | 2.58 | | 2.60 | 2.58 | 2.59 |
| MIN | | 2.20 | 2.40 | 2.40 | 2.28 | | 2.60 | 2.28 | 2.28 |
| MAX | | 2.80 | 3.20 | 3.00 | 3.00 | | 2.60 | 3.00 | 3.00 |
| N | | 5.00 | 5.00 | 5.00 | 5.00 | | 1.00 | 5.00 | 6.00 |

1981->82

| | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|
| MEAN | | 2.48 | | | | 2.60 | | 2.60 | 2.55 |
| MIN | | 2.30 | | | | 2.60 | | 2.60 | 2.49 |
| MAX | | 2.60 | | | | 2.60 | | 2.60 | 2.60 |
| N | | 4.00 | | | | 1.00 | | 1.00 | 2.00 |

1982->83

| | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|
| MEAN | 2.49 | 2.48 | 2.46 | 2.52 | 2.44 | | | 2.45 | 2.46 |
| MIN | 2.49 | 2.30 | 2.30 | 2.40 | 2.34 | | | 2.34 | 2.34 |
| MAX | 2.49 | 2.50 | 2.50 | 2.60 | 2.51 | | | 2.51 | 2.57 |
| N | 1.00 | 5.00 | 5.00 | 5.00 | 5.00 | | | 6.00 | 6.00 |

1983->84

| | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|
| MEAN | 2.57 | 2.33 | 2.30 | 2.34 | 2.33 | | | 2.37 | |
| MIN | 2.57 | 2.20 | 2.20 | 2.20 | 2.20 | | | 2.20 | |
| MAX | 2.57 | 2.60 | 2.40 | 2.40 | 2.46 | | | 2.57 | |
| N | 1.00 | 6.00 | 5.00 | 5.00 | 5.00 | | | 6.00 | |

Table 19 con't

CLEAR
CLIDUR Chloride mg/L

CALCULATION DATE: 84/07/16

1978->79

| | | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | | | | | | | 0.50 | | |
| MIN | I | | | | | | | 0.45 | | |
| MAX | I | | | | | | | 0.55 | | |
| N | I | | | | | | | 2.00 | | |

1979->80

| | | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 0.475 | 0.50 | | | 0.475 | | | 0.475 | 0.475 |
| MIN | I | 0.45 | 0.45 | | | 0.45 | | | 0.45 | 0.45 |
| MAX | I | 0.50 | 0.55 | | | 0.50 | | | 0.50 | 0.50 |
| N | I | 2.00 | 2.00 | | | 2.00 | | | 4.00 | 2.00 |

1980->81

| | | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | | 0.444 | 0.456 | 0.476 | 0.451 | | 0.41 | 0.451 | 0.444 |
| MIN | I | | 0.41 | 0.42 | 0.43 | 0.417 | | 0.41 | 0.417 | 0.41 |
| MAX | I | | 0.46 | 0.52 | 0.51 | 0.474 | | 0.41 | 0.474 | 0.474 |
| N | I | | 5.00 | 5.00 | 5.00 | 5.00 | | 1.00 | 5.00 | 6.00 |

1981->82

| | | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | | 0.408 | | | | 0.40 | | 0.40 | 0.395 |
| MIN | I | | 0.40 | | | | 0.40 | | 0.40 | 0.389 |
| MAX | I | | 0.55 | | | | 0.40 | | 0.40 | 0.40 |
| N | I | | 4.00 | | | | 1.00 | | 1.00 | 2.00 |

1982->83

| | | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 0.389 | 0.388 | 0.344 | 0.408 | 0.37 | | | 0.373 | 0.368 |
| MIN | I | 0.389 | 0.36 | 0.14 | 0.38 | 0.28 | | | 0.28 | 0.28 |
| MAX | I | 0.389 | 0.40 | 0.40 | 0.45 | 0.416 | | | 0.416 | 0.416 |
| N | I | 1.00 | 5.00 | 5.00 | 5.00 | 5.00 | | | 6.00 | 6.00 |

1983->84

| | | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 0.363 | 0.348 | 0.388 | 0.425 | 0.376 | | | 0.374 | |
| MIN | I | 0.363 | 0.26 | 0.32 | 0.26 | 0.29 | | | 0.29 | |
| MAX | I | 0.363 | 0.41 | 0.46 | 0.86 | 0.457 | | | 0.457 | |
| N | I | 1.00 | 6.00 | 6.00 | 6.00 | 6.00 | | | 7.00 | |

Table 19 con't

CLEAR
COLTR Colour (true)

CALCULATION DATE: 84/07/16

1978->79

| | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|
| MEAN | | | | | | | 5.00 | | |
| MIN | | | | | | | 5.00 | | |
| MAX | | | | | | | 5.00 | | |
| N | | | | | | | 1.00 | | |

1979->80

| | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|
| MEAN | 5.00 | 5.00 | | | 5.00 | | | 5.00 | 5.00 |
| MIN | 5.00 | 5.00 | | | 5.00 | | | 5.00 | 5.00 |
| MAX | 5.00 | 5.00 | | | 5.00 | | | 5.00 | 5.00 |
| N | 2.00 | 1.00 | | | 3.00 | | | 5.00 | 3.00 |

1980->81

| | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|
| MEAN | | 5.00 | 5.00 | 5.00 | 5.00 | | 4.00 | 5.00 | 4.50 |
| MIN | | 5.00 | 5.00 | 5.00 | 5.00 | | 4.00 | 5.00 | 4.00 |
| MAX | | 5.00 | 5.00 | 5.00 | 5.00 | | 4.00 | 5.00 | 5.00 |
| N | | 1.00 | 1.00 | 1.00 | 1.00 | | 1.00 | 1.00 | 2.00 |

1981->82

| | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|
| MEAN | | 3.25 | | | | 5.00 | | 5.00 | 5.36 |
| MIN | | 1.00 | | | | 5.00 | | 5.00 | 5.00 |
| MAX | | 7.00 | | | | 5.00 | | 5.00 | 5.72 |
| N | | 4.00 | | | | 1.00 | | 1.00 | 2.00 |

1982->83

| | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|
| MEAN | 5.72 | 6.00 | 6.60 | 14.0 | 6.57 | | | 6.43 | 6.54 |
| MIN | 5.72 | 5.00 | 5.00 | 2.00 | 4.58 | | | 4.58 | 4.58 |
| MAX | 5.72 | 7.00 | 9.00 | 27.0 | 8.63 | | | 8.63 | 8.63 |
| N | 1.00 | 5.00 | 5.00 | 5.00 | 5.00 | | | 6.00 | 6.00 |

1983->84

| | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|
| MEAN | 6.43 | 4.33 | 3.83 | 9.50 | 4.77 | | | 5.00 | |
| MIN | 6.43 | 2.00 | 2.00 | 4.00 | 2.39 | | | 2.39 | |
| MAX | 6.43 | 7.00 | 7.00 | 18.0 | 7.59 | | | 7.59 | |
| N | 1.00 | 6.00 | 6.00 | 6.00 | 6.00 | | | 7.00 | |

Table 19 con't

CLEAR
COND25 Conductivity (25 C)

CALCULATION DATE: 84/07/16

1978->79

| | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|
| MEAN | | | | | | | 28.5 | | |
| MIN | | | | | | | 28.0 | | |
| MAX | | | | | | | 29.0 | | |
| N | | | | | | | 2.00 | | |

1979->80

| | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|
| MEAN | 29.5 | 28.0 | | | 27.7 | | | 28.3 | 27.7 |
| MIN | 29.0 | 28.0 | | | 26.8 | | | 26.8 | 26.8 |
| MAX | 30.0 | 28.0 | | | 28.0 | | | 30.0 | 28.0 |
| N | 2.00 | 2.00 | | | 4.00 | | | 6.00 | 4.00 |

1980->81

| | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|
| MEAN | | 27.0 | 28.0 | 29.0 | 28.0 | | 28.0 | 28.0 | 28.0 |
| MIN | | 26.0 | 28.0 | 29.0 | 27.3 | | 28.0 | 27.3 | 27.3 |
| MAX | | 28.0 | 30.0 | 30.0 | 28.0 | | 28.0 | 28.0 | 28.0 |
| N | | 5.00 | 5.00 | 5.00 | 5.00 | | 1.00 | 5.00 | 6.00 |

1981->82

| | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|
| MEAN | | 27.0 | | | | 28.0 | | 28.0 | 27.0 |
| MIN | | 27.0 | | | | 28.0 | | 28.0 | 27.5 |
| MAX | | 28.0 | | | | 28.0 | | 28.0 | 28.0 |
| N | | 4.00 | | | | 1.00 | | 1.00 | 2.00 |

1982->83

| | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|
| MEAN | 27.5 | 26.6 | 27.0 | 28.0 | 27.3 | | | 27.4 | 27.2 |
| MIN | 27.5 | 26.0 | 27.0 | 28.0 | 26.9 | | | 26.9 | 26.3 |
| MAX | 27.5 | 27.0 | 29.0 | 30.0 | 27.8 | | | 27.8 | 27.8 |
| N | 1.00 | 5.00 | 5.00 | 5.00 | 5.00 | | | 6.00 | 6.00 |

1983->84

| | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|
| MEAN | 26.3 | 26.4 | 26.6 | 27.6 | 26.6 | | | 26.6 | |
| MIN | 26.3 | 26.0 | 26.0 | 27.0 | 26.2 | | | 26.2 | |
| MAX | 26.3 | 27.0 | 27.6 | 28.4 | 27.1 | | | 27.1 | |
| N | 1.00 | 6.00 | 6.00 | 6.00 | 6.00 | | | 7.00 | |

Table 19 con't

CLEAR
DIC Dissolved Inorganic Carbon mg/L

CALCULATION DATE: 84/07/16
DETECTION LIMIT USED: .01

1978->79

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | | | | | | | 0.40 | | |
| MIN | I | | | | | | | 0.40 | | |
| MAX | I | | | | | | | 0.40 | | |
| N | I | | | | | | | 1.00 | | |

1979->80

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 0.80 | 0.01L | | | 0.20 | | | 0.50 | 0.20 |
| MIN | I | 0.40 | 0.01 | | | 0.20 | | | 0.20 | 0.20 |
| MAX | I | 1.20 | 0.01 | | | 0.20 | | | 1.20 | 0.20 |
| N | I | 2.00 | 1.00 | | | 2.00 | | | 4.00 | 2.00 |

1980->81

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | | 0.267 | 0.65 | 1.08 | 0.689 | | 0.60 | 0.689 | 0.606 |
| MIN | I | | 0.20 | 0.20 | 0.40 | 0.372 | | 0.60 | 0.372 | 0.372 |
| MAX | I | | 0.40 | 1.80 | 2.40 | 0.845 | | 0.60 | 0.845 | 0.845 |
| N | I | | 3.00 | 4.00 | 5.00 | 2.00 | | 1.00 | 2.00 | 3.00 |

1981->82

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | | 0.45 | | | | 0.40 | | 0.40 | 0.50 |
| MIN | I | | 0.30 | | | | 0.40 | | 0.40 | 0.40 |
| MAX | I | | 0.60 | | | | 0.40 | | 0.40 | 0.60 |
| N | I | | 4.00 | | | | 1.00 | | 1.00 | 2.00 |

1982->83

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 0.60 | 0.186 | 0.688 | 1.92 | 0.555 | | | 0.563 | 0.562 |
| MIN | I | 0.60 | 0.09 | 0.29 | 0.83 | 0.428 | | | 0.428 | 0.428 |
| MAX | I | 0.60 | 0.27 | 1.54 | 3.01 | 0.69 | | | 0.69 | 0.69 |
| N | I | 1.00 | 5.00 | 5.00 | 5.00 | 5.00 | | | 6.00 | 6.00 |

1983->84

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 0.593 | 0.255 | 0.857 | 1.45 | 0.529 | | | 0.539 | |
| MIN | I | 0.593 | 0.18 | 0.37 | 0.96 | 0.435 | | | 0.435 | |
| MAX | I | 0.593 | 0.42 | 2.35 | 2.45 | 0.619 | | | 0.619 | |
| N | I | 1.00 | 6.00 | 6.00 | 6.00 | 6.00 | | | 7.00 | |

Table 19 con't

CLEAR
DOC Dissolved Organic Carbon mg/L

CALCULATION DATE: 84/07/16

1978->79

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | | | | | | | 2.10 | | |
| MIN | I | | | | | | | 1.80 | | |
| MAX | I | | | | | | | 2.40 | | |
| N | I | | | | | | | 2.00 | | |

1979->80

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 2.20 | 1.70 | | | 1.80 | | | 2.00 | 1.80 |
| MIN | I | 1.60 | 1.60 | | | 1.70 | | | 1.60 | 1.70 |
| MAX | I | 2.80 | 1.80 | | | 1.90 | | | 2.80 | 1.90 |
| N | I | 2.00 | 2.00 | | | 2.00 | | | 4.00 | 2.00 |

1980->81

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | | 1.92 | 1.80 | 1.70 | 1.87 | | 1.70 | 1.87 | 1.84 |
| MIN | I | | 1.60 | 1.70 | 1.60 | 1.70 | | 1.70 | 1.70 | 1.70 |
| MAX | I | | 2.10 | 1.90 | 1.80 | 2.02 | | 1.70 | 2.02 | 2.02 |
| N | I | | 5.00 | 5.00 | 5.00 | 5.00 | | 1.00 | 5.00 | 6.00 |

1981->82

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | | 1.75 | | | | 2.20 | | 2.20 | 1.89 |
| MIN | I | | 1.60 | | | | 2.20 | | 2.20 | 1.58 |
| MAX | I | | 2.00 | | | | 2.20 | | 2.20 | 2.20 |
| N | I | | 4.00 | | | | 1.00 | | 1.00 | 2.00 |

1982->83

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 1.58 | 1.56 | 1.35 | 1.34 | 1.42 | | | 1.45 | 1.45 |
| MIN | I | 1.58 | 1.20 | 0.80 | 0.80 | 1.10 | | | 1.10 | 1.10 |
| MAX | I | 1.58 | 1.80 | 1.80 | 1.70 | 1.64 | | | 1.64 | 1.64 |
| N | I | 1.00 | 5.00 | 4.00 | 5.00 | 4.00 | | | 5.00 | 5.00 |

1983->84

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 1.58 | 1.62 | 1.52 | 1.45 | 1.57 | | | 1.57 | |
| MIN | I | 1.58 | 1.50 | 1.20 | 1.30 | 1.48 | | | 1.48 | |
| MAX | I | 1.58 | 1.80 | 1.80 | 1.60 | 1.79 | | | 1.79 | |
| N | I | 1.00 | 6.00 | 6.00 | 6.00 | 6.00 | | | 7.00 | |

CLEAR — CALCULATION DATE: 84/07/16

FEUT Iron ug/L

1978->79

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | | | | | | | 93.3 | | |
| MIN | I | | | | | | | 50.0 | | |
| MAX | I | | | | | | | 150. | | |
| N | I | | | | | | | 3.00 | | |

1979->80

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 65.0 | 25.0 | | | 30.0 | | | 47.5 | 30.0 |
| MIN | I | 50.0 | 20.0 | | | 10.0 | | | 10.0 | 10.0 |
| MAX | I | 80.0 | 30.0 | | | 50.0 | | | 80.0 | 50.0 |
| N | I | 2.00 | 2.00 | | | 2.00 | | | 4.00 | 2.00 |

1980->81

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | | 18.0 | 28.0 | 322. | 64.5 | | 110. | 64.5 | 72.1 |
| MIN | I | | 10.0 | 20.0 | 70.0 | 27.8 | | 110. | 27.8 | 27.8 |
| MAX | I | | 20.0 | 40.0 | 900. | 147. | | 110. | 147. | 147. |
| N | I | | 5.00 | 5.00 | 5.00 | 5.00 | | 1.00 | 5.00 | 6.00 |

1981->82

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | | 25.0 | | | | 80.0 | | 80.0 | 64.9 |
| MIN | I | | 10.0 | | | | 80.0 | | 80.0 | 49.7 |
| MAX | I | | 40.0 | | | | 80.0 | | 80.0 | 80.0 |
| N | I | | 4.00 | | | | 1.00 | | 1.00 | 2.00 |

1982->83

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 49.7 | 13.0 | 32.0 | 316. | 45.0 | | | 45.7 | 44.9 |
| MIN | I | 49.7 | 5.00 | 15.0 | 45.0 | 24.9 | | | 24.9 | 24.9 |
| MAX | I | 49.7 | 20.0 | 85.0 | 685. | 64.1 | | | 64.1 | 64.1 |
| N | I | 1.00 | 5.00 | 5.00 | 5.00 | 5.00 | | | 6.00 | 6.00 |

1983->84

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 44.4 | 15.0 | 29.2 | 181. | 31.3 | | | 33.2 | |
| MIN | I | 44.4 | 5.00 | 5.00 | 35.0 | 13.8 | | | 13.8 | |
| MAX | I | 44.4 | 30.0 | 85.0 | 470. | 51.3 | | | 51.3 | |
| N | I | 1.00 | 6.00 | 6.00 | 6.00 | 6.00 | | | 7.00 | |

CLEAR — CALCULATION DATE: 84/07/16

FFIDUR Fluoride ug/L

1983->84

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | | 53.6 | 52.8 | 53.9 | 53.6 | | | 53.6 | |
| MIN | I | | 48.0 | 48.8 | 50.8 | 48.5 | | | 48.5 | |
| MAX | I | | 61.7 | 61.2 | 65.1 | 62.6 | | | 62.6 | |
| N | I | | 5.00 | 5.00 | 5.00 | 5.00 | | | 5.00 | |

Table 19 con't

CLEAR
KKUN Potassium mg/L

CALCULATION DATE: 84/07/16

1978->79

| | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1 -> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|
| MEAN | | | | | | | 0.30 | | |
| MIN | | | | | | | 0.25 | | |
| MAX | | | | | | | 0.35 | | |
| N | | | | | | | 3.00 | | |

1979->80

| | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1 -> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|
| MEAN | 0.35 | 0.375 | | | 0.30 | | | 0.325 | 0.30 |
| MIN | 0.35 | 0.35 | | | 0.30 | | | 0.30 | 0.30 |
| MAX | 0.35 | 0.40 | | | 0.30 | | | 0.35 | 0.30 |
| N | 2.00 | 2.00 | | | 2.00 | | | 4.00 | 2.00 |

1980->81

| | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1 -> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|
| MEAN | | 0.35 | 0.35 | 0.37 | 0.354 | | 0.35 | 0.354 | 0.353 |
| MIN | | 0.30 | 0.30 | 0.35 | 0.300 | | 0.35 | 0.300 | 0.300 |
| MAX | | 0.40 | 0.40 | 0.40 | 0.40 | | 0.35 | 0.40 | 0.40 |
| N | | 5.00 | 5.00 | 5.00 | 5.00 | | 1.00 | 5.00 | 6.00 |

1981->82

| | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1 -> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|
| MEAN | | 0.293 | | | | 0.30 | | 0.30 | 0.295 |
| MIN | | 0.25 | | | | 0.30 | | 0.30 | 0.29 |
| MAX | | 0.32 | | | | 0.30 | | 0.30 | 0.30 |
| N | | 4.00 | | | | 1.00 | | 1.00 | 2.00 |

1982->83

| | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1 -> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|
| MEAN | 0.29 | 0.265 | 0.292 | 0.312 | 0.283 | | | 0.284 | 0.294 |
| MIN | 0.29 | 0.24 | 0.26 | 0.28 | 0.268 | | | 0.268 | 0.268 |
| MAX | 0.29 | 0.30 | 0.30 | 0.34 | 0.30 | | | 0.30 | 0.34 |
| N | 1.00 | 4.00 | 5.00 | 5.00 | 4.00 | | | 5.00 | 5.00 |

1983->84

| | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1 -> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|
| MEAN | 0.34 | 0.293 | 0.292 | 0.312 | 0.296 | | | 0.305 | |
| MIN | 0.34 | 0.28 | 0.28 | 0.28 | 0.28 | | | 0.28 | |
| MAX | 0.34 | 0.34 | 0.30 | 0.34 | 0.319 | | | 0.34 | |
| N | 1.00 | 6.00 | 5.00 | 5.00 | 5.00 | | | 6.00 | |

CLEAR
MGUR Magnesium mg/L

CALCULATION DATE: 84/07/16

1978->79

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | | | | | | | 0.60 | | |
| MIN | I | | | | | | | 0.60 | | |
| MAX | I | | | | | | | 0.60 | | |
| N | I | | | | | | | 3.00 | | |

1979->80

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 0.525 | 0.475 | | | 0.60 | | | 0.563 | 0.60 |
| MIN | I | 0.50 | 0.45 | | | 0.60 | | | 0.50 | 0.60 |
| MAX | I | 0.55 | 0.50 | | | 0.60 | | | 0.60 | 0.60 |
| N | I | 2.00 | 2.00 | | | 2.00 | | | 4.00 | 2.00 |

1980->81

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | | 0.488 | 0.513 | 0.50 | 0.499 | | 0.60 | 0.499 | 0.519 |
| MIN | I | | 0.35 | 0.48 | 0.45 | 0.387 | | 0.60 | 0.387 | 0.387 |
| MAX | I | | 0.65 | 0.65 | 0.60 | 0.643 | | 0.60 | 0.643 | 0.643 |
| N | I | | 4.00 | 4.00 | 4.00 | 4.00 | | 1.00 | 4.00 | 5.00 |

1981->82

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | | 0.550 | | | | 0.60 | | 0.60 | 0.58 |
| MIN | I | | 0.50 | | | | 0.60 | | 0.60 | 0.56 |
| MAX | I | | 0.60 | | | | 0.60 | | 0.60 | 0.60 |
| N | I | | 4.00 | | | | 1.00 | | 1.00 | 2.00 |

1982->83

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 0.56 | 0.548 | 0.548 | 0.544 | 0.545 | | | 0.548 | 0.542 |
| MIN | I | 0.56 | 0.54 | 0.54 | 0.50 | 0.536 | | | 0.536 | 0.524 |
| MAX | I | 0.56 | 0.56 | 0.56 | 0.58 | 0.561 | | | 0.561 | 0.561 |
| N | I | 1.00 | 5.00 | 5.00 | 5.00 | 5.00 | | | 6.00 | 6.00 |

1983->84

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 0.524 | 0.533 | 0.508 | 0.508 | 0.518 | | | 0.519 | |
| MIN | I | 0.524 | 0.50 | 0.48 | 0.48 | 0.492 | | | 0.492 | |
| MAX | I | 0.524 | 0.56 | 0.56 | 0.54 | 0.553 | | | 0.553 | |
| N | I | 1.00 | 6.00 | 5.00 | 5.00 | 5.00 | | | 6.00 | |

CLEAR
MNUT Manganese ug/L

CALCULATION DATE: 84/07/16

1978->79

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | | | | | | | 119. | | |
| MIN | I | | | | | | | 119. | | |
| MAX | I | | | | | | | 119. | | |
| N | I | | | | | | | 1.00 | | |

1979->80

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 108. | 35.0 | | | 83.0 | | | 95.5 | 83.0 |
| MIN | I | 103. | 26.0 | | | 78.0 | | | 78.0 | 78.0 |
| MAX | I | 113. | 44.0 | | | 88.0 | | | 113. | 88.0 |
| N | I | 2.00 | 2.00 | | | 2.00 | | | 4.00 | 2.00 |

1980->81

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | | 53.6 | 145. | 228. | 96.3 | | 98.0 | 96.3 | 96.6 |
| MIN | I | | 39.0 | 77.0 | 144. | 86.6 | | 98.0 | 86.6 | 86.6 |
| MAX | I | | 69.0 | 304. | 352. | 116. | | 98.0 | 116. | 116. |
| N | I | | 5.00 | 5.00 | 5.00 | 5.00 | | 1.00 | 5.00 | 6.00 |

1981->82

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | | 70.0 | | | | 122. | | 122. | 117. |
| MIN | I | | 18.0 | | | | 122. | | 122. | 113. |
| MAX | I | | 124. | | | | 122. | | 122. | 122. |
| N | I | | 4.00 | | | | 1.00 | | 1.00 | 2.00 |

1982->83

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 113. | 48.2 | 88.8 | 206. | 71.1 | | | 78.0 | 66.1 |
| MIN | I | 113. | 23.0 | 46.0 | 78.0 | 63.0 | | | 63.0 | 48.9 |
| MAX | I | 113. | 77.0 | 170. | 375. | 77.9 | | | 113. | 77.9 |
| N | I | 1.00 | 5.00 | 5.00 | 5.00 | 5.00 | | | 6.00 | 6.00 |

1983->84

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 48.9 | 39.7 | 101. | 159. | 61.7 | | | 58.7 | |
| MIN | I | 48.9 | 14.0 | 26.0 | 15.0 | 41.4 | | | 48.9 | |
| MAX | I | 48.9 | 71.0 | 250. | 275. | 79.6 | | | 79.6 | |
| N | I | 1.00 | 6.00 | 6.00 | 6.00 | 6.00 | | | 7.00 | |

Table 19 con't

CLEAR
NAUR Sodium mg/L

CALCULATION DATE: 84/07/16

1978->79

| | | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | | | | | | | 0.55 | | |
| MIN | I | | | | | | | 0.40 | | |
| MAX | I | | | | | | | 0.70 | | |
| N | I | | | | | | | 2.00 | | |

1979->80

| | | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 0.55 | 0.55 | | | 0.40 | | | 0.475 | 0.40 |
| MIN | I | 0.50 | 0.50 | | | 0.40 | | | 0.40 | 0.40 |
| MAX | I | 0.60 | 0.60 | | | 0.40 | | | 0.60 | 0.40 |
| N | I | 2.00 | 2.00 | | | 2.00 | | | 4.00 | 2.00 |

1980->81

| | | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | | 0.54 | 0.54 | 0.50 | 0.53 | | 0.40 | 0.53 | 0.500 |
| MIN | I | | 0.40 | 0.40 | 0.40 | 0.40 | | 0.40 | 0.40 | 0.40 |
| MAX | I | | 0.70 | 0.70 | 0.60 | 0.675 | | 0.40 | 0.675 | 0.675 |
| N | I | | 5.00 | 5.00 | 5.00 | 5.00 | | 1.00 | 5.00 | 6.00 |

1981->82

| | | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | | 0.563 | | | | 0.60 | | 0.60 | 0.575 |
| MIN | I | | 0.40 | | | | 0.60 | | 0.60 | 0.55 |
| MAX | I | | 0.70 | | | | 0.60 | | 0.60 | 0.60 |
| N | I | | 4.00 | | | | 1.00 | | 1.00 | 2.00 |

1982->83

| | | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 0.55 | 0.463 | 0.43 | 0.45 | 0.452 | | | 0.472 | 0.452 |
| MIN | I | 0.55 | 0.45 | 0.40 | 0.40 | 0.427 | | | 0.427 | 0.427 |
| MAX | I | 0.55 | 0.50 | 0.50 | 0.50 | 0.50 | | | 0.55 | 0.50 |
| N | I | 1.00 | 4.00 | 5.00 | 5.00 | 4.00 | | | 5.00 | 5.00 |

1983->84

| | | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 0.45 | 0.40 | 0.36 | 0.37 | 0.379 | | | 0.391 | |
| MIN | I | 0.45 | 0.35 | 0.30 | 0.35 | 0.332 | | | 0.332 | |
| MAX | I | 0.45 | 0.45 | 0.45 | 0.40 | 0.443 | | | 0.45 | |
| N | I | 1.00 | 6.00 | 5.00 | 5.00 | 5.00 | | | 6.00 | |

Table 19 con't

CLEAR
NNHTFR Ammonium as N ug/L

CALCULATION DATE: 84/07/16
DETECTION LIMIT USED:1

1978->79

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | | | | | | | 75.0 | | |
| MIN | I | | | | | | | 75.0 | | |
| MAX | I | | | | | | | 75.0 | | |
| N | I | | | | | | | 1.00 | | |

1979->80

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 50.0 | | | | 14.0 | | | 32.0 | 14.0 |
| MIN | I | 50.0 | | | | 14.0 | | | 14.0 | 14.0 |
| MAX | I | 50.0 | | | | 14.0 | | | 50.0 | 14.0 |
| N | I | 1.00 | | | | 1.00 | | | 2.00 | 1.00 |

1981->82

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | | 2.00 | | | | 2.00 | | 2.00 | 14.5 |
| MIN | I | | 1.00 | | | | 2.00 | | 2.00 | 2.00 |
| MAX | I | | 4.00 | | | | 2.00 | | 2.00 | 27.1 |
| N | I | | 4.00 | | | | 1.00 | | 1.00 | 2.00 |

1982->83

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 27.1 | 2.20L | 1.40L | 50.0 | 7.63L | | | 10.9L | 8.80L |
| MIN | I | 27.1 | 1.00 | 1.00 | 20.0 | 6.02 | | | 6.02 | 6.02 |
| MAX | I | 27.1 | 5.00 | 2.00 | 90.0 | 9.35 | | | 27.1 | 14.7 |
| N | I | 1.00 | 5.00 | 5.00 | 5.00 | 5.00 | | | 6.00 | 6.00 |

1983->84

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 14.7 | 1.58L | 13.8L | 75.2 | 10.4L | | | 11.0L | |
| MIN | I | 14.7 | 1.00 | 1.00 | 25.0 | 7.06 | | | 7.06 | |
| MAX | I | 14.7 | 3.50 | 71.0 | 165. | 16.4 | | | 16.4 | |
| N | I | 1.00 | 6.00 | 6.00 | 6.00 | 6.00 | | | 7.00 | |

CLEAR
NNOTFR Nitrate and Nitrite as N ug/L

CALCULATION DATE: 84/07/16
DETECTION LIMIT USED:2

1978->79

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | | | | | | | 5.00 | | |
| MIN | I | | | | | | | 5.00 | | |
| MAX | I | | | | | | | 5.00 | | |
| N | I | | | | | | | 1.00 | | |

1979->80

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 20.0 | | | | 10.0 | | | 15.0 | 10.0 |
| MIN | I | 20.0 | | | | 10.0 | | | 10.0 | 10.0 |
| MAX | I | 20.0 | | | | 10.0 | | | 20.0 | 10.0 |
| N | I | 1.00 | | | | 1.00 | | | 2.00 | 1.00 |

1981->82

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | | 125. | | | | | | | 32.0 |
| MIN | I | | 125. | | | | | | | 32.0 |
| MAX | I | | 125. | | | | | | | 32.0 |
| N | I | | 1.00 | | | | | | | 1.00 |

1982->83

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 32.0 | 5.00L | 2.20L | 24.5 | 5.97L | | | 11.3L | 7.50L |
| MIN | I | 32.0 | 1.00 | 1.00 | 20.0 | 3.35 | | | 3.35 | 3.35 |
| MAX | I | 32.0 | 15.0 | 5.00 | 35.0 | 12.6 | | | 32.0 | 13.6 |
| N | I | 1.00 | 4.00 | 5.00 | 4.00 | 4.00 | | | 5.00 | 5.00 |

1983->84

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 13.6 | 3.17L | 3.83L | 15.0 | 4.61L | | | 5.89L | |
| MIN | I | 13.6 | 2.00 | 2.00 | 8.00 | 3.05 | | | 3.05 | |
| MAX | I | 13.6 | 7.00 | 12.0 | 20.0 | 7.88 | | | 13.6 | |
| N | I | 1.00 | 6.00 | 6.00 | 6.00 | 6.00 | | | 7.00 | |

CLEAR
NNTKUR Total Kjeldahl Nitrogen ug/L

CALCULATION DATE: 84/07/16

1978->79

| | | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | | | | | | | 328. | | |
| MIN | I | | | | | | | 285. | | |
| MAX | I | | | | | | | 370. | | |
| N | I | | | | | | | 2.00 | | |

1979->80

| | | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 190. | 170. | | | 160. | | | 170. | 160. |
| MIN | I | 140. | 170. | | | 100. | | | 100. | 100. |
| MAX | I | 240. | 170. | | | 275. | | | 275. | 275. |
| N | I | 2.00 | 1.00 | | | 4.00 | | | 6.00 | 4.00 |

1980->81

| | | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | | 214. | 164. | 230. | 199. | | 165. | 199. | 192. |
| MIN | I | | 145. | 105. | 175. | 145. | | 165. | 145. | 145. |
| MAX | I | | 275. | 225. | 280. | 254. | | 165. | 254. | 254. |
| N | I | | 4.00 | 4.00 | 4.00 | 4.00 | | 1.00 | 4.00 | 5.00 |

1981->82

| | | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | | 161. | | | | 200. | | 200. | 173. |
| MIN | I | | 140. | | | | 200. | | 200. | 145. |
| MAX | I | | 175. | | | | 200. | | 200. | 200. |
| N | I | | 4.00 | | | | 1.00 | | 1.00 | 2.00 |

1982->83

| | | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 145. | 138. | 132. | 201. | 145. | | | 145. | 144. |
| MIN | I | 145. | 120. | 115. | 180. | 126. | | | 126. | 126. |
| MAX | I | 145. | 160. | 145. | 230. | 161. | | | 161. | 161. |
| N | I | 1.00 | 5.00 | 5.00 | 5.00 | 5.00 | | | 6.00 | 6.00 |

1983->84

| | | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 138. | 133. | 143. | 201. | 138. | | | 138. | |
| MIN | I | 138. | 110. | 110. | 150. | 119. | | | 119. | |
| MAX | I | 138. | 200. | 210. | 295. | 189. | | | 189. | |
| N | I | 1.00 | 6.00 | 6.00 | 6.00 | 6.00 | | | 7.00 | |

Table 19 con't

CLEAR
PH pH (-LOG(Hydrogen conc'n))

CALCULATION DATE: 84/07/16

1978->79

| | | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | | | | | | | 5.65 | | |
| MIN | I | | | | | | | 5.58 | | |
| MAX | I | | | | | | | 5.72 | | |
| N | I | | | | | | | 2.00 | | |

1979->80

| | | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 5.65 | 5.81 | | | 5.74 | | | 5.71 | 5.74 |
| MIN | I | 5.50 | 5.78 | | | 5.62 | | | 5.50 | 5.62 |
| MAX | I | 5.79 | 5.83 | | | 5.83 | | | 5.83 | 5.83 |
| N | I | 2.00 | 2.00 | | | 4.00 | | | 6.00 | 4.00 |

1980->81

| | | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | | 5.82 | 5.85 | 5.78 | 5.83 | | 5.78 | 5.83 | 5.82 |
| MIN | I | | 5.69 | 5.58 | 5.56 | 5.68 | | 5.78 | 5.68 | 5.68 |
| MAX | I | | 6.08 | 6.16 | 5.91 | 5.97 | | 5.78 | 5.97 | 5.97 |
| N | I | | 5.00 | 5.00 | 5.00 | 5.00 | | 1.00 | 5.00 | 6.00 |

1981->82

| | | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | | 5.92 | | | | 5.97 | | 5.97 | 5.86 |
| MIN | I | | 5.67 | | | | 5.97 | | 5.97 | 5.76 |
| MAX | I | | 6.26 | | | | 5.97 | | 5.97 | 5.97 |
| N | I | | 4.00 | | | | 1.00 | | 1.00 | 2.00 |

1982->83

| | | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 5.76 | 5.81 | 5.85 | 5.74 | 5.81 | | | 5.80 | 5.80 |
| MIN | I | 5.76 | 5.64 | 5.64 | 5.66 | 5.65 | | | 5.65 | 5.65 |
| MAX | I | 5.76 | 5.92 | 6.01 | 5.82 | 5.95 | | | 5.95 | 5.95 |
| N | I | 1.00 | 5.00 | 5.00 | 5.00 | 5.00 | | | 6.00 | 6.00 |

1983->84

| | | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 5.75 | 5.79 | 5.71 | 5.68 | 5.74 | | | 5.74 | |
| MIN | I | 5.75 | 5.70 | 5.60 | 5.54 | 5.64 | | | 5.64 | |
| MAX | I | 5.75 | 5.87 | 5.78 | 5.77 | 5.78 | | | 5.78 | |
| N | I | 1.00 | 6.00 | 6.00 | 6.00 | 6.00 | | | 7.00 | |

CLEAR
PPUT Total Phosphorous ug/L

CALCULATION DATE: 84/07/16

1978->79

| | | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | | | | | | | 4.30 | | |
| MIN | I | | | | | | | 3.00 | | |
| MAX | I | | | | | | | 5.60 | | |
| N | I | | | | | | | 2.00 | | |

1979->80

| | | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 4.45 | 2.85 | | | 4.62 | | | 4.58 | 4.62 |
| MIN | I | 4.45 | 2.85 | | | 3.00 | | | 3.00 | 3.00 |
| MAX | I | 4.45 | 2.85 | | | 6.25 | | | 6.25 | 6.25 |
| N | I | 1.00 | 1.00 | | | 3.00 | | | 4.00 | 3.00 |

1980->81

| | | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | | 5.20 | 4.84 | 7.81 | 5.42 | | | 5.42 | 5.42 |
| MIN | I | | 3.23 | 3.27 | 6.67 | 3.73 | | | 3.73 | 3.73 |
| MAX | I | | 8.35 | 6.40 | 9.73 | 7.34 | | | 7.34 | 7.34 |
| N | I | | 4.00 | 4.00 | 4.00 | 4.00 | | | 4.00 | 4.00 |

1981->82

| | | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | | 5.15 | | | | 6.00 | | 6.00 | 4.81 |
| MIN | I | | 2.07 | | | | 6.00 | | 6.00 | 3.62 |
| MAX | I | | 9.00 | | | | 6.00 | | 6.00 | 6.00 |
| N | I | | 4.00 | | | | 1.00 | | 1.00 | 2.00 |

1982->83

| | | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 3.62 | 3.42 | 4.49 | 6.75 | 4.50 | | | 4.35 | 4.67 |
| MIN | I | 3.62 | 2.95 | 3.28 | 6.10 | 4.14 | | | 3.62 | 4.14 |
| MAX | I | 3.62 | 4.07 | 5.70 | 7.73 | 5.16 | | | 5.16 | 5.56 |
| N | I | 1.00 | 5.00 | 5.00 | 5.00 | 5.00 | | | 6.00 | 6.00 |

1983->84

| | | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 5.56 | 3.32 | 3.66 | 5.70 | 3.46 | | | 3.81 | |
| MIN | I | 5.56 | 2.43 | 2.93 | 4.40 | 2.88 | | | 2.88 | |
| MAX | I | 5.56 | 4.07 | 4.70 | 8.13 | 4.08 | | | 5.56 | |
| N | I | 1.00 | 6.00 | 5.00 | 6.00 | 5.00 | | | 6.00 | |

CLEAR CALCULATION DATE: 84/07/16
BIOJUR Silicates mg/L

1978->79

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | | | | | | | 0.30 | | |
| MIN | I | | | | | | | 0.20 | | |
| MAX | I | | | | | | | 0.40 | | |
| N | I | | | | | | | 2.00 | | |

1979->80

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 0.30 | 0.125 | | | 0.20 | | | 0.25 | 0.20 |
| MIN | I | 0.30 | 0.10 | | | 0.20 | | | 0.20 | 0.20 |
| MAX | I | 0.30 | 0.15 | | | 0.20 | | | 0.30 | 0.20 |
| N | I | 2.00 | 2.00 | | | 2.00 | | | 4.00 | 2.00 |

1980->81

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | | 0.19 | 0.14 | 0.36 | 0.192 | | 0.10 | 0.192 | 0.177 |
| MIN | I | | 0.05 | 0.05 | 0.30 | 0.113 | | 0.10 | 0.113 | 0.10 |
| MAX | I | | 0.25 | 0.25 | 0.45 | 0.258 | | 0.10 | 0.258 | 0.258 |
| N | I | | 5.00 | 5.00 | 5.00 | 5.00 | | 1.00 | 5.00 | 6.00 |

1981->82

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | | 0.125 | | | | 0.10 | | 0.10 | 0.173 |
| MIN | I | | 0.05 | | | | 0.10 | | 0.10 | 0.10 |
| MAX | I | | 0.25 | | | | 0.10 | | 0.10 | 0.246 |
| N | I | | 4.00 | | | | 1.00 | | 1.00 | 2.00 |

1982->83

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 0.246 | 0.132 | 0.18 | 0.416 | 0.166 | | | 0.182 | 0.201 |
| MIN | I | 0.246 | 0.04 | 0.12 | 0.24 | 0.102 | | | 0.102 | 0.102 |
| MAX | I | 0.246 | 0.22 | 0.26 | 0.58 | 0.229 | | | 0.246 | 0.339 |
| N | I | 1.00 | 5.00 | 4.00 | 5.00 | 4.00 | | | 5.00 | 5.00 |

1983->84

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 0.339 | 0.238 | 0.27 | 0.397 | 0.25 | | | 0.263 | |
| MIN | I | 0.339 | 0.18 | 0.19 | 0.29 | 0.208 | | | 0.208 | |
| MAX | I | 0.339 | 0.32 | 0.47 | 0.66 | 0.301 | | | 0.339 | |
| N | I | 1.00 | 6.00 | 6.00 | 6.00 | 6.00 | | | 7.00 | |

CLEAR
SSO4UR Sulphate as SO4 mg/L

CALCULATION DATE: 84/07/16

1978->79

| | I I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | | | | | | | 9.00 | | |
| MIN | I | | | | | | | 8.50 | | |
| MAX | I | | | | | | | 9.50 | | |
| N | I | | | | | | | 3.00 | | |

1979->80

| | I I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 9.00 | 9.25 | | | 9.50 | | | 9.25 | 9.50 |
| MIN | I | 8.50 | 9.00 | | | 9.50 | | | 8.50 | 9.50 |
| MAX | I | 9.50 | 9.50 | | | 9.50 | | | 9.50 | 9.50 |
| N | I | 2.00 | 2.00 | | | 2.00 | | | 4.00 | 2.00 |

1980->81

| | I I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | | 8.53 | 8.60 | 8.56 | 8.57 | | 8.20 | 8.57 | 8.51 |
| MIN | I | | 8.45 | 8.50 | 7.95 | 8.43 | | 8.20 | 8.43 | 8.20 |
| MAX | I | | 8.70 | 8.70 | 9.00 | 8.73 | | 8.20 | 8.73 | 8.73 |
| N | I | | 5.00 | 5.00 | 5.00 | 5.00 | | 1.00 | 5.00 | 6.00 |

1981->82

| | I I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | | 9.05 | | | | 8.60 | | 8.60 | 8.56 |
| MIN | I | | 8.50 | | | | 8.60 | | 8.60 | 8.52 |
| MAX | I | | 9.30 | | | | 8.60 | | 8.60 | 8.60 |
| N | I | | 4.00 | | | | 1.00 | | 1.00 | 2.00 |

1982->83

| | I I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 8.52 | 7.93 | 8.07 | 7.78 | 8.10 | | | 8.19 | 8.11 |
| MIN | I | 8.52 | 7.40 | 7.90 | 7.30 | 7.92 | | | 7.92 | 7.92 |
| MAX | I | 8.52 | 8.30 | 8.30 | 8.40 | 8.33 | | | 8.52 | 8.33 |
| N | I | 1.00 | 5.00 | 4.00 | 5.00 | 4.00 | | | 5.00 | 5.00 |

1983->84

| | I I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 8.16 | 8.28 | 8.19 | 7.90 | 8.24 | | | 8.23 | |
| MIN | I | 8.16 | 8.06 | 7.76 | 7.49 | 8.04 | | | 8.04 | |
| MAX | I | 8.16 | 8.42 | 9.11 | 8.16 | 8.59 | | | 8.59 | |
| N | I | 1.00 | 6.00 | 6.00 | 6.00 | 6.00 | | | 7.00 | |

CROWN

Calculation date: 84/07/16

1983->84

| | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|
| START | 830425 | 830521 | 830521 | 830521 | 830521 | 831101 | | 830425 | |
| END | 830528 | 831031 | 831031 | 831031 | 831031 | 831110 | | 831110 | |

ALKTI Alkalinity, TIA as CaCO3 mg/L

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 0.60 | 0.724 | 0.796 | 1.03 | 0.746 | 0.93 | | 0.763 | |
| MIN | I | 0.60 | 0.59 | 0.61 | 0.57 | 0.612 | 0.93 | | 0.612 | |
| MAX | I | 0.60 | 0.87 | 1.17 | 1.86 | 0.94 | 0.93 | | 0.94 | |
| N | I | 1.00 | 5.00 | 5.00 | 5.00 | 5.00 | 1.00 | | 7.00 | |

ALUT Aluminum ug/L

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 29.0 | 11.8 | 17.3 | 29.3 | 14.6 | 11.0 | | 16.4 | |
| MIN | I | 29.0 | 2.00 | 11.0 | 24.0 | 5.22 | 11.0 | | 5.22 | |
| MAX | I | 29.0 | 20.0 | 24.0 | 33.0 | 20.4 | 11.0 | | 29.0 | |
| N | I | 1.00 | 4.00 | 4.00 | 4.00 | 4.00 | 1.00 | | 6.00 | |

CAUR Calcium mg/L

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 2.20 | 2.08 | 2.06 | 2.06 | 2.07 | 2.00 | | 2.08 | |
| MIN | I | 2.20 | 1.90 | 1.90 | 1.90 | 1.90 | 2.00 | | 1.90 | |
| MAX | I | 2.20 | 2.20 | 2.20 | 2.20 | 2.20 | 2.00 | | 2.20 | |
| N | I | 1.00 | 5.00 | 5.00 | 5.00 | 5.00 | 1.00 | | 7.00 | |

CLIDUR Chloride mg/L DETECTION LIMIT USED: .05

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 0.30 | 0.274 | 0.256 | 0.228L | 0.264L | 0.29 | | 0.273L | |
| MIN | I | 0.30 | 0.15 | 0.19 | 0.05 | 0.168 | 0.29 | | 0.168 | |
| MAX | I | 0.30 | 0.36 | 0.32 | 0.35 | 0.344 | 0.29 | | 0.344 | |
| N | I | 1.00 | 5.00 | 5.00 | 5.00 | 5.00 | 1.00 | | 7.00 | |

COLTR Colour (true)

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 5.00 | 4.00 | 6.00 | 10.6 | 5.29 | 9.00 | | 5.78 | |
| MIN | I | 5.00 | 2.00 | 4.00 | 4.00 | 2.76 | 9.00 | | 2.76 | |
| MAX | I | 5.00 | 6.00 | 8.00 | 19.0 | 7.65 | 9.00 | | 9.00 | |
| N | I | 1.00 | 5.00 | 5.00 | 5.00 | 5.00 | 1.00 | | 7.00 | |

COND25 Conductivity (25 C)

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 25.0 | 25.0 | 25.3 | 26.3 | 25.1 | 24.4 | | 25.0 | |
| MIN | I | 25.0 | 25.0 | 25.0 | 26.0 | 25.1 | 24.4 | | 24.4 | |
| MAX | I | 25.0 | 25.0 | 26.4 | 27.0 | 25.2 | 24.4 | | 25.2 | |
| N | I | 1.00 | 5.00 | 5.00 | 5.00 | 5.00 | 1.00 | | 7.00 | |

Table 20 Crown Lake

CROWN
1983->84

CALCULATION DATE: 84/07/16

DIC Dissolved Inorganic Carbon mg/L

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 0.62 | 0.312 | 0.862 | 1.29 | 0.486 | 0.52 | | 0.51 | |
| MIN | I | 0.62 | 0.26 | 0.50 | 0.80 | 0.42 | 0.52 | | 0.42 | |
| MAX | I | 0.62 | 0.42 | 2.04 | 1.76 | 0.644 | 0.52 | | 0.644 | |
| N | I | 1.00 | 5.00 | 5.00 | 5.00 | 5.00 | 1.00 | | 7.00 | |

DOC Dissolved Organic Carbon mg/L

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 1.60 | 1.90 | 1.68 | 1.64 | 1.82 | 1.80 | | 1.70 | |
| MIN | I | 1.60 | 1.70 | 1.60 | 1.50 | 1.61 | 1.80 | | 1.60 | |
| MAX | I | 1.60 | 2.00 | 1.80 | 1.80 | 1.96 | 1.80 | | 1.96 | |
| N | I | 1.00 | 5.00 | 5.00 | 5.00 | 5.00 | 1.00 | | 7.00 | |

FEUT Iron ug/L

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 10.0 | 14.2 | 20.0 | 146. | 21.0 | 100. | | 30.7 | |
| MIN | I | 10.0 | 5.00 | 5.00 | 25.0 | 6.62 | 100. | | 6.62 | |
| MAX | I | 10.0 | 26.0 | 85.0 | 370. | 40.5 | 100. | | 100. | |
| N | I | 1.00 | 5.00 | 5.00 | 5.00 | 5.00 | 1.00 | | 7.00 | |

FFIDUR Fluoride ug/L

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | | 39.2 | 38.0 | 33.9 | 38.3 | 37.1 | | 38.1 | |
| MIN | I | | 36.3 | 33.2 | 29.1 | 35.9 | 37.1 | | 35.9 | |
| MAX | I | | 45.0 | 46.7 | 36.2 | 43.9 | 37.1 | | 43.9 | |
| N | I | | 4.00 | 4.00 | 4.00 | 4.00 | 1.00 | | 5.00 | |

KKUR Potassium mg/L

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 0.36 | 0.332 | 0.336 | 0.348 | 0.335 | 0.30 | | 0.333 | |
| MIN | I | 0.36 | 0.32 | 0.32 | 0.32 | 0.324 | 0.30 | | 0.30 | |
| MAX | I | 0.36 | 0.34 | 0.34 | 0.36 | 0.341 | 0.30 | | 0.36 | |
| N | I | 1.00 | 5.00 | 5.00 | 5.00 | 5.00 | 1.00 | | 7.00 | |

MGUR Magnesium mg/L

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 0.52 | 0.532 | 0.556 | 0.56 | 0.543 | 0.52 | | 0.536 | |
| MIN | I | 0.52 | 0.48 | 0.50 | 0.48 | 0.482 | 0.52 | | 0.482 | |
| MAX | I | 0.52 | 0.58 | 0.58 | 0.60 | 0.581 | 0.52 | | 0.581 | |
| N | I | 1.00 | 5.00 | 5.00 | 5.00 | 5.00 | 1.00 | | 7.00 | |

MNUT Manganese ug/L

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 10.0 | 15.6 | 40.2 | 70.6 | 23.5 | 36.0 | | 23.4 | |
| MIN | I | 10.0 | 3.00 | 20.0 | 31.0 | 12.1 | 36.0 | | 10.0 | |
| MAX | I | 10.0 | 24.0 | 90.0 | 131. | 35.2 | 36.0 | | 36.0 | |
| N | I | 1.00 | 5.00 | 5.00 | 5.00 | 5.00 | 1.00 | | 7.00 | |

Table 20 con't

CROWN
1983->84

CALCULATION DATE: 84/07/16

NAUR Sodium mg/L

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 0.55 | 0.47 | 0.46 | 0.48 | 0.47 | 0.45 | | 0.479 | |
| MIN | I | 0.55 | 0.40 | 0.40 | 0.45 | 0.407 | 0.45 | | 0.407 | |
| MAX | I | 0.55 | 0.50 | 0.50 | 0.50 | 0.50 | 0.45 | | 0.55 | |
| N | I | 1.00 | 5.00 | 5.00 | 5.00 | 5.00 | 1.00 | | 7.00 | |

NNHTFR Ammonium as N ug/L

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 23.0 | 2.60 | 17.8 | 51.8 | 8.38 | 24.0 | | 12.7 | |
| MIN | I | 23.0 | 1.00 | 6.00 | 24.0 | 5.10 | 24.0 | | 5.10 | |
| MAX | I | 23.0 | 5.00 | 53.0 | 91.0 | 11.7 | 24.0 | | 24.0 | |
| N | I | 1.00 | 5.00 | 5.00 | 5.00 | 5.00 | 1.00 | | 7.00 | |

NNOTFR Nitrate and Nitrite as N ug/L DETECTION LIMIT USED:2

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 80.0 | 21.2L | 49.4 | 82.4 | 31.0L | 25.0 | | 37.2L | |
| MIN | I | 80.0 | 2.00 | 20.0 | 75.0 | 10.2 | 25.0 | | 10.2 | |
| MAX | I | 80.0 | 68.0 | 68.0 | 95.0 | 69.0 | 25.0 | | 80.0 | |
| N | I | 1.00 | 5.00 | 5.00 | 5.00 | 5.00 | 1.00 | | 7.00 | |

NNTKUR Total Kjeldahl Nitrogen ug/L

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 145. | 143. | 154. | 193. | 147. | 150. | | 147. | |
| MIN | I | 145. | 136. | 140. | 155. | 138. | 150. | | 138. | |
| MAX | I | 145. | 150. | 170. | 260. | 158. | 150. | | 158. | |
| N | I | 1.00 | 5.00 | 5.00 | 5.00 | 5.00 | 1.00 | | 7.00 | |

PH pH [-LOG(Hydrogen conc'n)]

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 5.92 | 6.10 | 5.86 | 5.67 | 6.02 | 6.05 | | 6.01 | |
| MIN | I | 5.92 | 5.96 | 5.62 | 5.58 | 5.87 | 6.05 | | 5.87 | |
| MAX | I | 5.92 | 6.24 | 5.99 | 5.81 | 6.15 | 6.05 | | 6.15 | |
| N | I | 1.00 | 5.00 | 5.00 | 5.00 | 5.00 | 1.00 | | 7.00 | |

PPUT Total Phosphorous ug/L

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 5.10 | 3.37 | 4.28 | 5.36 | 3.90 | 3.77 | | 4.05 | |
| MIN | I | 5.10 | 2.83 | 3.10 | 4.10 | 3.21 | 3.77 | | 3.21 | |
| MAX | I | 5.10 | 4.17 | 5.50 | 7.00 | 4.74 | 3.77 | | 5.10 | |
| N | I | 1.00 | 5.00 | 5.00 | 5.00 | 5.00 | 1.00 | | 7.00 | |

SIO3UR Silicates mg/L

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 0.55 | 0.38 | 0.408 | 0.568 | 0.334 | 0.31 | | 0.361 | |
| MIN | I | 0.55 | 0.15 | 0.31 | 0.50 | 0.20 | 0.31 | | 0.20 | |
| MAX | I | 0.55 | 0.58 | 0.49 | 0.62 | 0.503 | 0.31 | | 0.55 | |
| N | I | 1.00 | 5.00 | 5.00 | 5.00 | 5.00 | 1.00 | | 7.00 | |

CROWN
1983-'84

CALCULATION DATE: 84/07/16

SO4UR Sulphate as SO4 mg/L

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1 - MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 8.30 | 7.49 | 7.35 | 7.40 | 7.40 | 7.42 | | 7.59 | |
| MIN | I | 8.30 | 7.21 | 6.85 | 6.94 | 7.16 | 7.42 | | 7.16 | |
| MAX | I | 8.30 | 7.74 | 7.60 | 7.71 | 7.67 | 7.42 | | 8.30 | |
| N | I | 1.00 | 5.00 | 5.00 | 5.00 | 5.00 | 1.00 | | 7.00 | |

Table 20 con't

DELANO

Calculation date: 04/07/16

1982->83

| | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1 -> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|
| START | 820427 | 820521 | 820521 | 820521 | 820521 | 821116 | | 820427 | 820601 |
| END | 820520 | 821115 | 821115 | 821115 | 821115 | 821213 | | 821213 | 830531 |

1983->84

| | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1 -> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|
| START | 830425 | 830521 | 830521 | 830521 | 830521 | 831101 | | 830425 | |
| END | 830520 | 831031 | 831031 | 831031 | 831031 | 831110 | | 831110 | |

DELANO
ALKTI Alkalinity, TIA as CaCO3 mg/L

CALCULATION DATE: 04/07/16

1982->83

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1 -> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 1.94 | 2.05 | 3.24 | 5.15 | 2.77 | | | 2.65 | 2.65 |
| MIN | I | 1.94 | 1.74 | 2.23 | 2.74 | 2.25 | | | 1.94 | 1.90 |
| MAX | I | 1.94 | 2.45 | 5.59 | 8.58 | 3.24 | | | 3.24 | 3.24 |
| N | I | 1.00 | 6.00 | 6.00 | 6.00 | 6.00 | | | 7.00 | 7.00 |

1983->84

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1 -> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 1.90 | 1.91 | 2.32 | 3.44 | 2.32 | | | 2.24 | |
| MIN | I | 1.90 | 1.78 | 2.00 | 2.25 | 1.90 | | | 1.90 | |
| MAX | I | 1.90 | 2.10 | 2.60 | 4.50 | 2.71 | | | 2.71 | |
| N | I | 1.00 | 4.00 | 4.00 | 4.00 | 4.00 | | | 5.00 | |

DELANO
ALUT Aluminum ug/L

CALCULATION DATE: 04/07/16

1982->83

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1 -> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 69.0 | 45.0 | 68.0 | 99.0 | 54.3 | | | 56.0 | 57.3 |
| MIN | I | 69.0 | 19.0 | 34.0 | 81.0 | 36.9 | | | 36.9 | 36.9 |
| MAX | I | 69.0 | 110. | 85.0 | 110. | 68.3 | | | 69.0 | 71.0 |
| N | I | 1.00 | 5.00 | 5.00 | 5.00 | 5.00 | | | 6.00 | 6.00 |

1983->84

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1 -> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 71.0 | 21.0 | 50.5 | 60.3 | 39.5 | | | 46.0 | |
| MIN | I | 71.0 | 10.0 | 10.0 | 12.0 | 10.4 | | | 10.4 | |
| MAX | I | 71.0 | 35.0 | 95.0 | 101. | 69.6 | | | 71.0 | |
| N | I | 1.00 | 4.00 | 4.00 | 4.00 | 4.00 | | | 5.00 | |

DELANO
CAUR Calcium mg/L

CALCULATION DATE: 84/07/16

1982-)83

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-) MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 2.72 | 2.33 | 2.67 | 2.87 | 2.51 | | | 2.54 | 2.55 |
| MIN | I | 2.72 | 2.09 | 2.10 | 2.20 | 2.10 | | | 2.10 | 2.10 |
| MAX | I | 2.72 | 2.58 | 3.00 | 3.20 | 2.60 | | | 2.72 | 2.75 |
| N | I | 1.00 | 6.00 | 6.00 | 6.00 | 6.00 | | | 7.00 | 7.00 |

1983-)84

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-) MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 2.75 | 2.43 | 2.53 | 2.75 | 2.53 | | | 2.58 | |
| MIN | I | 2.75 | 2.20 | 2.30 | 2.40 | 2.29 | | | 2.29 | |
| MAX | I | 2.75 | 2.80 | 2.90 | 3.10 | 2.80 | | | 2.80 | |
| N | I | 1.00 | 4.00 | 4.00 | 4.00 | 4.00 | | | 5.00 | |

DELANO
CLIDUR Chloride mg/L

CALCULATION DATE: 84/07/16

1982-)83

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-) MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 0.310 | 0.30 | 0.330 | 0.303 | 0.333 | | | 0.331 | 0.329 |
| MIN | I | 0.310 | 0.25 | 0.30 | 0.35 | 0.305 | | | 0.305 | 0.303 |
| MAX | I | 0.310 | 0.35 | 0.40 | 0.45 | 0.357 | | | 0.357 | 0.357 |
| N | I | 1.00 | 6.00 | 6.00 | 6.00 | 6.00 | | | 7.00 | 7.00 |

1983-)84

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-) MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 0.303 | 0.250 | 0.303 | 0.265 | 0.273 | | | 0.281 | |
| MIN | I | 0.303 | 0.20 | 0.22 | 0.22 | 0.211 | | | 0.211 | |
| MAX | I | 0.303 | 0.31 | 0.37 | 0.31 | 0.310 | | | 0.310 | |
| N | I | 1.00 | 4.00 | 3.00 | 4.00 | 3.00 | | | 4.00 | |

DELANO
COLTR Colour (true)

CALCULATION DATE: 84/07/16

1982-)83

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-) MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 27.5 | 29.2 | 46.8 | 73.8 | 39.9 | | | 38.2 | 39.0 |
| MIN | I | 27.5 | 27.8 | 26.8 | 48.8 | 34.8 | | | 27.5 | 33.8 |
| MAX | I | 27.5 | 33.8 | 75.8 | 94.8 | 45.6 | | | 45.6 | 45.6 |
| N | I | 1.00 | 6.00 | 6.00 | 6.00 | 6.00 | | | 7.00 | 7.00 |

1983-)84

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-) MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 33.8 | 22.5 | 31.8 | 59.3 | 32.3 | | | 32.6 | |
| MIN | I | 33.8 | 20.8 | 27.8 | 37.8 | 28.1 | | | 28.1 | |
| MAX | I | 33.8 | 29.8 | 38.8 | 84.8 | 35.5 | | | 35.5 | |
| N | I | 1.00 | 4.00 | 4.00 | 4.00 | 4.00 | | | 5.00 | |

DELANO — CALCULATION DATE: 84/07/16
COND25 Conductivity (25 C)

1982->83

| | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|
| MEAN | 29.0 | 28.5 | 32.3 | 34.5 | 30.6 | | | 30.5 | 30.5 |
| MIN | 29.0 | 28.0 | 30.0 | 32.0 | 30.1 | | | 29.0 | 29.9 |
| MAX | 29.0 | 30.0 | 36.0 | 37.0 | 31.1 | | | 31.1 | 31.1 |
| N | 1.00 | 6.00 | 6.00 | 6.00 | 6.00 | | | 7.00 | 7.00 |

1983->84

| | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|
| MEAN | 29.9 | 29.2 | 30.6 | 32.5 | 30.4 | | | 30.3 | |
| MIN | 29.9 | 29.0 | 30.0 | 32.0 | 30.0 | | | 29.9 | |
| MAX | 29.9 | 29.5 | 31.5 | 33.5 | 30.9 | | | 30.9 | |
| N | 1.00 | 4.00 | 4.00 | 4.00 | 4.00 | | | 5.00 | |

DELANO — CALCULATION DATE: 84/07/16
DIC Dissolved Inorganic Carbon mg/L

1982->83

| | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|
| MEAN | 0.996 | 0.645 | 2.98 | 4.01 | 1.81 | | | 1.70 | 1.75 |
| MIN | 0.996 | 0.45 | 1.55 | 1.85 | 1.38 | | | 0.996 | 1.38 |
| MAX | 0.996 | 1.05 | 5.61 | 5.51 | 1.99 | | | 1.99 | 1.99 |
| N | 1.00 | 6.00 | 6.00 | 6.00 | 6.00 | | | 7.00 | 7.00 |

1983->84

| | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|
| MEAN | 1.38 | 0.533 | 1.73 | 3.07 | 1.45 | | | 1.44 | |
| MIN | 1.38 | 0.48 | 1.30 | 2.54 | 1.18 | | | 1.18 | |
| MAX | 1.38 | 0.59 | 2.04 | 3.60 | 1.69 | | | 1.69 | |
| N | 1.00 | 4.00 | 4.00 | 4.00 | 4.00 | | | 5.00 | |

DELANO — CALCULATION DATE: 84/07/16
DOC Dissolved Organic Carbon mg/L

1982->83

| | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|
| MEAN | 4.62 | 4.43 | 4.53 | 4.86 | 4.32 | | | 4.37 | 4.32 |
| MIN | 4.62 | 3.90 | 4.00 | 4.30 | 4.04 | | | 4.04 | 4.04 |
| MAX | 4.62 | 5.70 | 5.70 | 5.40 | 4.51 | | | 4.62 | 4.51 |
| N | 1.00 | 6.00 | 6.00 | 5.00 | 5.00 | | | 6.00 | 6.00 |

1983->84

| | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|
| MEAN | 4.32 | 4.50 | 4.30 | 4.50 | 4.42 | | | 4.40 | |
| MIN | 4.32 | 4.30 | 4.10 | 4.20 | 4.21 | | | 4.21 | |
| MAX | 4.32 | 4.80 | 4.40 | 4.80 | 4.58 | | | 4.58 | |
| N | 1.00 | 4.00 | 4.00 | 4.00 | 4.00 | | | 5.00 | |

DELANO
FEUT Iron ug/L

CALCULATION DATE: 84/07/16

1982->83

| | I I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 204. | 92.5 | 602. | 1700. | 425. | | | 388. | 381. |
| MIN | I | 204. | 60.0 | 155. | 460. | 225. | | | 204. | 160. |
| MAX | I | 204. | 200. | 2000. | 3720. | 660. | | | 660. | 660. |
| N | I | 1.00 | 6.00 | 6.00 | 5.00 | 5.00 | | | 6.00 | 6.00 |

1983->84

| | I I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 160. | 48.8 | 158. | 820. | 223. | | | 211. | |
| MIN | I | 160. | 20.0 | 55.0 | 265. | 85.5 | | | 85.5 | |
| MAX | I | 160. | 80.0 | 275. | 1480. | 421. | | | 421. | |
| N | I | 1.00 | 4.00 | 4.00 | 4.00 | 4.00 | | | 5.00 | |

DELANO
FFIDUR Fluoride ug/L

CALCULATION DATE: 84/07/16

1983->84

| | I I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | | 43.9 | 40.7 | 41.7 | 42.3 | | | 42.3 | |
| MIN | I | | 42.7 | 39.4 | 40.6 | 41.6 | | | 41.6 | |
| MAX | I | | 45.5 | 42.2 | 43.0 | 42.9 | | | 42.9 | |
| N | I | | 3.00 | 3.00 | 3.00 | 3.00 | | | 3.00 | |

DELANO
KKUR Potassium mg/L

CALCULATION DATE: 84/07/16

1982->83

| | I I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 0.42 | 0.388 | 0.407 | 0.43 | 0.40 | | | 0.403 | 0.411 |
| MIN | I | 0.42 | 0.36 | 0.38 | 0.40 | 0.386 | | | 0.386 | 0.386 |
| MAX | I | 0.42 | 0.42 | 0.44 | 0.44 | 0.424 | | | 0.424 | 0.469 |
| N | I | 1.00 | 5.00 | 6.00 | 6.00 | 5.00 | | | 6.00 | 6.00 |

1983->84

| | I I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 0.469 | 0.44 | 0.44 | 0.45 | 0.442 | | | 0.447 | |
| MIN | I | 0.469 | 0.42 | 0.42 | 0.42 | 0.42 | | | 0.42 | |
| MAX | I | 0.469 | 0.46 | 0.46 | 0.46 | 0.46 | | | 0.469 | |
| N | I | 1.00 | 4.00 | 4.00 | 4.00 | 4.00 | | | 5.00 | |

DELANO — CALCULATION DATE: 84/07/16
MGUR Magnesium mg/L

1982->83

| I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|
| MEAN I | 0.857 | 0.763 | 0.837 | 0.89 | 0.811 | | | 0.810 | 0.807 |
| MIN I | 0.857 | 0.72 | 0.76 | 0.84 | 0.765 | | | 0.765 | 0.765 |
| MAX I | 0.857 | 0.80 | 0.88 | 0.92 | 0.856 | | | 0.857 | 0.856 |
| N I | 1.00 | 6.00 | 6.00 | 6.00 | 6.00 | | | 7.00 | 7.00 |

1983->84

| I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|
| MEAN I | 0.783 | 0.805 | 0.835 | 0.87 | 0.828 | | | 0.819 | |
| MIN I | 0.783 | 0.78 | 0.82 | 0.84 | 0.813 | | | 0.783 | |
| MAX I | 0.783 | 0.82 | 0.84 | 0.90 | 0.839 | | | 0.839 | |
| N I | 1.00 | 4.00 | 4.00 | 4.00 | 4.00 | | | 5.00 | |

DELANO — CALCULATION DATE: 84/07/16
MNUT Manganese ug/L

1982->83

| I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|
| MEAN I | 47.0 | 23.3 | 135. | 293. | 86.6 | | | 80.0 | 77.2 |
| MIN I | 47.0 | 14.0 | 32.0 | 138. | 59.5 | | | 47.0 | 30.5 |
| MAX I | 47.0 | 43.0 | 382. | 400. | 101. | | | 101. | 101. |
| N I | 1.00 | 6.00 | 6.00 | 5.00 | 5.00 | | | 6.00 | 6.00 |

1983->84

| I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|
| MEAN I | 30.5 | 15.0 | 55.3 | 180. | 59.2 | | | 53.5 | |
| MIN I | 30.5 | 5.00 | 17.0 | 61.0 | 26.7 | | | 26.7 | |
| MAX I | 30.5 | 25.0 | 100. | 290. | 93.6 | | | 93.6 | |
| N I | 1.00 | 4.00 | 4.00 | 4.00 | 4.00 | | | 5.00 | |

DELANO — CALCULATION DATE: 84/07/16
NAUR Sodium mg/L

1982->83

| I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|
| MEAN I | 0.768 | 0.63 | 0.692 | 0.70 | 0.664 | | | 0.681 | 0.667 |
| MIN I | 0.768 | 0.55 | 0.65 | 0.60 | 0.599 | | | 0.599 | 0.599 |
| MAX I | 0.768 | 0.80 | 0.75 | 0.80 | 0.754 | | | 0.768 | 0.754 |
| N I | 1.00 | 5.00 | 6.00 | 6.00 | 5.00 | | | 6.00 | 6.00 |

1983->84

| I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|
| MEAN I | 0.682 | 0.613 | 0.613 | 0.65 | 0.62 | | | 0.632 | |
| MIN I | 0.682 | 0.55 | 0.60 | 0.60 | 0.592 | | | 0.592 | |
| MAX I | 0.682 | 0.65 | 0.65 | 0.70 | 0.656 | | | 0.682 | |
| N I | 1.00 | 4.00 | 4.00 | 4.00 | 4.00 | | | 5.00 | |

DELANO
NNHTFR Ammonium as N ug/L

CALCULATION DATE: 84/07/16
DETECTION LIMIT USED:1

1982->83

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 1.00L | 2.00L | 19.2 | 83.2 | 14.5L | | | 12.5L | 14.2L |
| MIN | I | 1.00 | 1.00 | 2.00 | 6.00 | 6.61 | | | 1.00 | 6.61 |
| MAX | I | 1.00 | 4.00 | 86.0 | 225. | 28.4 | | | 28.4 | 28.4 |
| N | I | 1.00 | 6.00 | 6.00 | 6.00 | 6.00 | | | 7.00 | 7.00 |

1983->84

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 12.5 | 3.75L | 4.50L | 20.8L | 6.33L | | | 7.56L | |
| MIN | I | 12.5 | 1.00 | 1.00 | 1.00 | 1.00 | | | 1.00 | |
| MAX | I | 12.5 | 10.0 | 14.0 | 44.0 | 9.33 | | | 12.5 | |
| N | I | 1.00 | 4.00 | 4.00 | 4.00 | 4.00 | | | 5.00 | |

DELANO
NNOTFR Nitrate and Nitrite as N ug/L

CALCULATION DATE: 84/07/16
DETECTION LIMIT USED:2

1982->83

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 167. | 11.2L | 72.5L | 64.3L | 47.6L | | | 64.6L | 57.0L |
| MIN | I | 167. | 1.00 | 2.00 | 2.00 | 2.00 | | | 2.00 | 2.00 |
| MAX | I | 167. | 45.0 | 110. | 160. | 108. | | | 167. | 114. |
| N | I | 1.00 | 6.00 | 6.00 | 6.00 | 6.00 | | | 7.00 | 7.00 |

1983->84

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 114. | 3.50L | 74.5 | 151. | 58.2L | | | 69.4L | |
| MIN | I | 114. | 2.00 | 55.0 | 109. | 43.6 | | | 43.6 | |
| MAX | I | 114. | 8.00 | 98.0 | 170. | 77.5 | | | 114. | |
| N | I | 1.00 | 4.00 | 4.00 | 4.00 | 4.00 | | | 5.00 | |

DELANO
NNTKUR Total Kjeldahl Nitrogen ug/L

CALCULATION DATE: 84/07/16

1982->83

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 224. | 233. | 267. | 369. | 257. | | | 252. | 251. |
| MIN | I | 224. | 205. | 225. | 240. | 231. | | | 224. | 219. |
| MAX | I | 224. | 255. | 365. | 535. | 292. | | | 292. | 292. |
| N | I | 1.00 | 6.00 | 6.00 | 6.00 | 6.00 | | | 7.00 | 7.00 |

1983->84

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 219. | 218. | 221. | 253. | 224. | | | 223. | |
| MIN | I | 219. | 195. | 215. | 205. | 212. | | | 212. | |
| MAX | I | 219. | 245. | 230. | 300. | 239. | | | 239. | |
| N | I | 1.00 | 4.00 | 4.00 | 4.00 | 4.00 | | | 5.00 | |

DELANO — CALCULATION DATE: 84/07/16
PH pH [-LOG(Hydrogen conc'n)]

1982->83

| | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|
| MEAN | 5.95 | 6.46 | 5.89 | 5.96 | 6.15 | | | 6.12 | 6.12 |
| MIN | 5.95 | 6.13 | 5.76 | 5.89 | 6.08 | | | 5.95 | 5.92 |
| MAX | 5.95 | 6.65 | 6.02 | 6.03 | 6.21 | | | 6.21 | 6.21 |
| N | 1.00 | 6.00 | 6.00 | 6.00 | 6.00 | | | 7.00 | 7.00 |

1983->84

| | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|
| MEAN | 5.92 | 6.43 | 5.91 | 5.87 | 6.13 | | | 6.09 | |
| MIN | 5.92 | 6.40 | 5.83 | 5.80 | 6.11 | | | 5.92 | |
| MAX | 5.92 | 6.46 | 6.02 | 5.95 | 6.16 | | | 6.16 | |
| N | 1.00 | 4.00 | 4.00 | 4.00 | 4.00 | | | 5.00 | |

DELANO — CALCULATION DATE: 84/07/16
PPUT Total Phosphorous ug/L

1982->83

| | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|
| MEAN | 7.09 | 6.56 | 10.5 | 15.8 | 9.16 | | | 8.86 | 8.98 |
| MIN | 7.09 | 5.20 | 8.15 | 10.5 | 8.73 | | | 7.09 | 7.90 |
| MAX | 7.09 | 8.00 | 15.0 | 18.7 | 9.50 | | | 9.50 | 9.50 |
| N | 1.00 | 6.00 | 6.00 | 6.00 | 6.00 | | | 7.00 | 7.00 |

1983->84

| | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|
| MEAN | 7.90 | 4.69 | 7.08 | 10.2 | 6.51 | | | 6.79 | |
| MIN | 7.90 | 3.60 | 6.10 | 6.70 | 5.11 | | | 5.11 | |
| MAX | 7.90 | 5.77 | 7.70 | 14.1 | 8.08 | | | 8.08 | |
| N | 1.00 | 4.00 | 4.00 | 4.00 | 4.00 | | | 5.00 | |

DELANO — CALCULATION DATE: 84/07/16
SIO3UR Silicates mg/L

1982->83

| | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|
| MEAN | 1.81 | 1.15 | 1.95 | 2.55 | 1.60 | | | 1.63 | 1.64 |
| MIN | 1.81 | 0.82 | 1.66 | 2.36 | 1.35 | | | 1.35 | 1.35 |
| MAX | 1.81 | 1.54 | 2.44 | 2.72 | 1.93 | | | 1.93 | 1.93 |
| N | 1.00 | 6.00 | 6.00 | 6.00 | 6.00 | | | 7.00 | 7.00 |

1983->84

| | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|
| MEAN | 1.87 | 0.855 | 1.61 | 2.37 | 1.42 | | | 1.51 | |
| MIN | 1.87 | 0.63 | 1.41 | 2.30 | 1.24 | | | 1.24 | |
| MAX | 1.87 | 1.25 | 1.77 | 2.51 | 1.70 | | | 1.87 | |
| N | 1.00 | 4.00 | 4.00 | 4.00 | 4.00 | | | 5.00 | |

DELANO
SSO4UR Sulphate as SO4 mg/L

CALCULATION DATE: 84/07/16

1982->83

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 7.85 | 7.30 | 7.43 | 7.17 | 7.37 | | | 7.44 | 7.42 |
| MIN | I | 7.85 | 6.99 | 6.66 | 5.62 | 6.84 | | | 6.84 | 6.84 |
| MAX | I | 7.85 | 7.60 | 7.80 | 8.10 | 7.84 | | | 7.85 | 7.84 |
| N | I | 1.00 | 6.00 | 6.00 | 6.00 | 6.00 | | | 7.00 | 7.00 |

1983->84

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 7.73 | 7.90 | 7.72 | 7.24 | 7.72 | | | 7.72 | |
| MIN | I | 7.73 | 7.25 | 7.10 | 6.26 | 7.03 | | | 7.03 | |
| MAX | I | 7.73 | 8.49 | 8.28 | 8.30 | 8.38 | | | 8.38 | |
| N | I | 1.00 | 4.00 | 4.00 | 4.00 | 4.00 | | | 5.00 | |

Table 21 con't

KIMBALL

Calculation date: 84/07/16

1983->84

| | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|
| START | 830425 | 830521 | 830521 | 830521 | 830521 | 831101 | | 830425 | |
| END | 830520 | 831031 | 831031 | 831031 | 831031 | 831118 | | 831118 | |

ALKTI Alkalinity, TIA as CaCO3 mg/L

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 1.06 | 1.34 | 1.18 | 1.24 | 1.26 | | | 1.23 | |
| MIN | I | 1.06 | 0.92 | 0.94 | 1.16 | 1.15 | | | 1.06 | |
| MAX | I | 1.06 | 1.51 | 1.27 | 1.37 | 1.37 | | | 1.37 | |
| N | I | 1.00 | 5.00 | 5.00 | 5.00 | 5.00 | | | 6.00 | |

ALUT Aluminum ug/L DETECTION LIMIT USED:1

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 57.0 | 18.2L | 54.4 | 48.6 | 41.2L | | | 43.8L | |
| MIN | I | 57.0 | 1.00 | 45.0 | 34.0 | 31.9 | | | 31.9 | |
| MAX | I | 57.0 | 48.0 | 72.0 | 71.0 | 58.7 | | | 58.7 | |
| N | I | 1.00 | 5.00 | 5.00 | 5.00 | 5.00 | | | 6.00 | |

CAUR Calcium mg/L

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 2.70 | 2.52 | 2.60 | 2.66 | 2.61 | | | 2.63 | |
| MIN | I | 2.70 | 2.30 | 2.50 | 2.50 | 2.52 | | | 2.52 | |
| MAX | I | 2.70 | 2.80 | 2.80 | 2.90 | 2.84 | | | 2.84 | |
| N | I | 1.00 | 5.00 | 5.00 | 5.00 | 5.00 | | | 6.00 | |

CLIDUR Chloride mg/L

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 0.35 | 0.318 | 0.338 | 0.378 | 0.351 | | | 0.351 | |
| MIN | I | 0.35 | 0.22 | 0.26 | 0.27 | 0.283 | | | 0.283 | |
| MAX | I | 0.35 | 0.38 | 0.40 | 0.46 | 0.386 | | | 0.386 | |
| N | I | 1.00 | 5.00 | 5.00 | 5.00 | 5.00 | | | 6.00 | |

COLTR Colour (true)

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 10.0 | 7.40 | 10.4 | 10.8 | 9.65 | | | 9.71 | |
| MIN | I | 10.0 | 4.00 | 8.00 | 7.00 | 5.93 | | | 5.93 | |
| MAX | I | 10.0 | 13.0 | 13.0 | 13.0 | 13.0 | | | 13.0 | |
| N | I | 1.00 | 5.00 | 5.00 | 5.00 | 5.00 | | | 6.00 | |

COND25 Conductivity (25 C)

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 30.0 | 30.0 | 30.4 | 31.0 | 30.6 | | | 30.5 | |
| MIN | I | 30.0 | 29.9 | 30.0 | 31.0 | 30.5 | | | 30.0 | |
| MAX | I | 30.0 | 30.0 | 31.2 | 31.2 | 30.7 | | | 30.7 | |
| N | I | 1.00 | 5.00 | 5.00 | 5.00 | 5.00 | | | 6.00 | |

Table 22 Kimball Lake

KIMBALL
1983->84

CALCULATION DATE: 84/07/16

DIC Dissolved Inorganic Carbon mg/L

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 0.85 | 0.422 | 0.836 | 1.04 | 0.798 | | | 0.807 | |
| MIN | I | 0.85 | 0.39 | 0.65 | 0.89 | 0.707 | | | 0.707 | |
| MAX | I | 0.85 | 0.46 | 1.28 | 1.26 | 0.937 | | | 0.937 | |
| N | I | 1.00 | 5.00 | 5.00 | 5.00 | 5.00 | | | 6.00 | |

DOC Dissolved Organic Carbon mg/L

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 2.50 | 2.46 | 2.54 | 2.42 | 2.46 | | | 2.47 | |
| MIN | I | 2.50 | 2.30 | 2.40 | 2.30 | 2.39 | | | 2.39 | |
| MAX | I | 2.50 | 2.60 | 2.70 | 2.60 | 2.57 | | | 2.57 | |
| N | I | 1.00 | 5.00 | 5.00 | 5.00 | 5.00 | | | 6.00 | |

FEUT Iron ug/L

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 80.0 | 21.0 | 21.0 | 37.0 | 27.5 | | | 36.3 | |
| MIN | I | 80.0 | 10.0 | 15.0 | 20.0 | 22.2 | | | 22.2 | |
| MAX | I | 80.0 | 35.0 | 35.0 | 70.0 | 34.3 | | | 80.0 | |
| N | I | 1.00 | 5.00 | 5.00 | 5.00 | 5.00 | | | 6.00 | |

FFIDUR Fluoride ug/L

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | | 44.1 | 43.7 | 44.9 | 44.7 | | | 44.7 | |
| MIN | I | | 39.0 | 42.5 | 42.0 | 43.2 | | | 43.2 | |
| MAX | I | | 46.1 | 44.8 | 49.6 | 46.3 | | | 46.3 | |
| N | I | | 4.00 | 4.00 | 4.00 | 4.00 | | | 4.00 | |

KKUR Potassium mg/L

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 0.40 | 0.392 | 0.38 | 0.392 | 0.389 | | | 0.391 | |
| MIN | I | 0.40 | 0.38 | 0.36 | 0.38 | 0.38 | | | 0.38 | |
| MAX | I | 0.40 | 0.40 | 0.40 | 0.42 | 0.41 | | | 0.41 | |
| N | I | 1.00 | 5.00 | 5.00 | 5.00 | 5.00 | | | 6.00 | |

MGUR Magnesium mg/L

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 0.66 | 0.732 | 0.756 | 0.732 | 0.741 | | | 0.727 | |
| MIN | I | 0.66 | 0.70 | 0.74 | 0.68 | 0.714 | | | 0.66 | |
| MAX | I | 0.66 | 0.76 | 0.76 | 0.78 | 0.77 | | | 0.77 | |
| N | I | 1.00 | 5.00 | 5.00 | 5.00 | 5.00 | | | 6.00 | |

MNUT Manganese ug/L

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 24.0 | 10.8 | 17.6 | 17.0 | 14.7 | | | 16.3 | |
| MIN | I | 24.0 | 6.00 | 8.00 | 10.0 | 8.71 | | | 8.71 | |
| MAX | I | 24.0 | 21.0 | 27.0 | 23.0 | 17.1 | | | 24.0 | |
| N | I | 1.00 | 5.00 | 5.00 | 5.00 | 5.00 | | | 6.00 | |

Table 22 con't

KIMBALL
1983->84

CALCULATION DATE: 84/07/16

NAUR Sodium mg/L

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 0.60 | 0.57 | 0.54 | 0.55 | 0.554 | | | 0.561 | |
| MIN | I | 0.60 | 0.55 | 0.50 | 0.50 | 0.531 | | | 0.531 | |
| MAX | I | 0.60 | 0.60 | 0.55 | 0.60 | 0.574 | | | 0.60 | |
| N | I | 1.00 | 5.00 | 5.00 | 5.00 | 5.00 | | | 6.00 | |

NNHTFR Ammonium as N ug/L

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 1.00 | 4.00 | 4.00 | 5.20 | 4.63 | | | 4.02 | |
| MIN | I | 1.00 | 2.00 | 2.00 | 1.00 | 2.38 | | | 1.00 | |
| MAX | I | 1.00 | 9.00 | 6.00 | 8.00 | 6.99 | | | 6.99 | |
| N | I | 1.00 | 5.00 | 5.00 | 5.00 | 5.00 | | | 6.00 | |

NNOTFR Nitrate and Nitrite as N ug/L

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 159. | 73.6 | 133. | 159. | 126. | | | 131. | |
| MIN | I | 159. | 42.0 | 125. | 155. | 111. | | | 111. | |
| MAX | I | 159. | 120. | 139. | 167. | 141. | | | 159. | |
| N | I | 1.00 | 5.00 | 5.00 | 5.00 | 5.00 | | | 6.00 | |

NNTKUR Total Kjeldahl Nitrogen ug/L

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 130. | 160. | 152. | 144. | 152. | | | 148. | |
| MIN | I | 130. | 150. | 140. | 130. | 144. | | | 130. | |
| MAX | I | 130. | 190. | 160. | 155. | 160. | | | 160. | |
| N | I | 1.00 | 5.00 | 5.00 | 5.00 | 5.00 | | | 6.00 | |

PH pH [-LOG(Hydrogen conc'n)]

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 5.93 | 6.36 | 5.93 | 5.85 | 6.03 | | | 6.01 | |
| MIN | I | 5.93 | 6.04 | 5.81 | 5.77 | 5.96 | | | 5.93 | |
| MAX | I | 5.93 | 6.56 | 5.98 | 5.93 | 6.10 | | | 6.10 | |
| N | I | 1.00 | 5.00 | 5.00 | 5.00 | 5.00 | | | 6.00 | |

PPUT Total Phospherous ug/L

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 3.90 | 3.31 | 4.19 | 3.59 | 3.65 | | | 3.69 | |
| MIN | I | 3.90 | 2.93 | 3.13 | 3.30 | 3.26 | | | 3.26 | |
| MAX | I | 3.90 | 3.70 | 5.47 | 4.03 | 4.03 | | | 4.03 | |
| N | I | 1.00 | 5.00 | 5.00 | 5.00 | 5.00 | | | 6.00 | |

SIO3UR Silicates mg/L

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 1.48 | 1.18 | 1.31 | 1.49 | 1.35 | | | 1.37 | |
| MIN | I | 1.48 | 1.00 | 1.19 | 1.43 | 1.24 | | | 1.24 | |
| MAX | I | 1.48 | 1.31 | 1.38 | 1.56 | 1.44 | | | 1.48 | |
| N | I | 1.00 | 5.00 | 5.00 | 5.00 | 5.00 | | | 6.00 | |

Table 22 con't

KIMBALL
1983->84

CALCULATION DATE: 84/07/16

SSO4UR Sulphate as SO4 mg/L

| | I I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 9.66 | 8.54 | 8.50 | 8.45 | 8.49 | | | 8.68 | |
| MIN | I | 9.66 | 8.48 | 8.39 | 8.08 | 8.27 | | | 8.27 | |
| MAX | I | 9.66 | 8.65 | 8.66 | 8.70 | 8.68 | | | 9.66 | |
| N | I | 1.00 | 5.00 | 5.00 | 5.00 | 5.00 | | | 6.00 | |

Table 22 con't

LOUISA

Calculation date: 84/07/16

1981->82

| | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|
| START | 810409 | 810622 | 810622 | 810622 | 810622 | 811021 | 811124 | 810409 | 810601 |
| END | 810621 | 811020 | 811020 | 811020 | 811020 | 811123 | 820330 | 811123 | 820531 |

1982->83

| | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|
| START | 820427 | 820521 | 820521 | 820521 | 820521 | 821201 | | 820427 | 820601 |
| END | 820520 | 821130 | 821130 | 821130 | 821130 | 821213 | | 821213 | 830531 |

1983->84

| | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|
| START | 830425 | 830521 | 830521 | 830521 | 830521 | 831101 | | 830425 | |
| END | 830520 | 831031 | 831031 | 831031 | 831031 | 831118 | | 831118 | |

LOUISA

CALCULATION DATE: 84/07/16

ALKTI Alkalinity, TIA as CaCO3 mg/L

1981->82

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 1.22 | 0.968 | 1.10 | 1.02 | 1.03 | 0.984 | 1.02 | 1.05 | 1.03 |
| MIN | I | 1.22 | 0.90 | 0.99 | 0.85 | 0.937 | 0.984 | 1.02 | 0.937 | 0.937 |
| MAX | I | 1.22 | 1.11 | 1.27 | 1.30 | 1.19 | 0.984 | 1.02 | 1.22 | 1.22 |
| N | I | 1.00 | 6.00 | 6.00 | 6.00 | 6.00 | 1.00 | 1.00 | 8.00 | 10.0 |

1982->83

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 0.938 | 1.14 | 1.11 | 0.953 | 1.07 | | | 1.05 | 1.06 |
| MIN | I | 0.938 | 0.96 | 0.97 | 0.88 | 0.93 | | | 0.93 | 0.93 |
| MAX | I | 0.938 | 1.30 | 1.26 | 1.14 | 1.16 | | | 1.16 | 1.16 |
| N | I | 1.00 | 6.00 | 6.00 | 6.00 | 6.00 | | | 7.00 | 7.00 |

1983->84

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 1.01 | 1.14 | 1.11 | 1.04 | 1.09 | | | 1.08 | |
| MIN | I | 1.01 | 0.92 | 0.96 | 0.92 | 0.939 | | | 0.939 | |
| MAX | I | 1.01 | 1.32 | 1.24 | 1.14 | 1.22 | | | 1.22 | |
| N | I | 1.00 | 4.00 | 4.00 | 4.00 | 4.00 | | | 5.00 | |

LOUISA
ALUT Aluminum ug/L

CALCULATION DATE: 84/07/16

| 1981->82 | | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 3.00 | | | | 32.0 | 42.0 | 36.0 | 25.7 | 34.4 |
| MIN | I | 3.00 | | | | 32.0 | 42.0 | 36.0 | 3.00 | 3.00 |
| MAX | I | 3.00 | | | | 32.0 | 42.0 | 36.0 | 42.0 | 59.0 |
| N | I | 1.00 | | | | 1.00 | 1.00 | 1.00 | 3.00 | 5.00 |

| 1982->83 | | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 59.0 | 20.0 | 46.3 | 47.5 | 36.6 | | | 39.0 | 39.5 |
| MIN | I | 59.0 | 12.0 | 34.0 | 36.0 | 25.4 | | | 25.4 | 25.4 |
| MAX | I | 59.0 | 30.0 | 71.0 | 82.0 | 54.9 | | | 59.0 | 57.0 |
| N | I | 1.00 | 6.00 | 6.00 | 6.00 | 6.00 | | | 7.00 | 7.00 |

| 1983->84 | | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 57.0 | 23.0 | 36.3 | 44.0 | 34.6 | | | 39.1 | |
| MIN | I | 57.0 | 10.0 | 26.0 | 39.0 | 31.0 | | | 31.0 | |
| MAX | I | 57.0 | 31.0 | 44.0 | 48.0 | 39.3 | | | 57.0 | |
| N | I | 1.00 | 4.00 | 4.00 | 4.00 | 4.00 | | | 5.00 | |

LOUISA
CAUR Calcium mg/L

CALCULATION DATE: 84/07/16

| 1981->82 | | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 2.63 | 2.60 | 2.57 | 2.65 | 2.59 | 2.63 | 2.60 | 2.60 | 2.60 |
| MIN | I | 2.63 | 2.50 | 2.40 | 2.50 | 2.54 | 2.63 | 2.60 | 2.54 | 2.54 |
| MAX | I | 2.63 | 2.70 | 2.80 | 2.80 | 2.67 | 2.63 | 2.60 | 2.67 | 2.67 |
| N | I | 1.00 | 6.00 | 6.00 | 6.00 | 6.00 | 1.00 | 1.00 | 8.00 | 10.0 |

| 1982->83 | | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 2.60 | 2.57 | 2.60 | 2.63 | 2.60 | | | 2.60 | 2.63 |
| MIN | I | 2.60 | 2.50 | 2.50 | 2.50 | 2.50 | | | 2.50 | 2.50 |
| MAX | I | 2.60 | 2.70 | 2.70 | 2.80 | 2.66 | | | 2.66 | 2.80 |
| N | I | 1.00 | 6.00 | 5.00 | 6.00 | 5.00 | | | 6.00 | 6.00 |

| 1983->84 | | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 2.80 | 2.48 | 2.53 | 2.50 | 2.53 | | | 2.50 | |
| MIN | I | 2.80 | 2.40 | 2.40 | 2.50 | 2.44 | | | 2.44 | |
| MAX | I | 2.80 | 2.60 | 2.70 | 2.70 | 2.66 | | | 2.80 | |
| N | I | 1.00 | 4.00 | 4.00 | 4.00 | 4.00 | | | 5.00 | |

LOUISA
CLIDUR Chloride mg/L

CALCULATION DATE: 84/07/16

1981-)82

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-) MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 0.377 | 0.350 | 0.375 | 0.375 | 0.37 | 0.437 | 0.30 | 0.379 | 0.363 |
| MIN | I | 0.377 | 0.30 | 0.30 | 0.30 | 0.32 | 0.437 | 0.30 | 0.32 | 0.30 |
| MAX | I | 0.377 | 0.40 | 0.45 | 0.45 | 0.424 | 0.437 | 0.30 | 0.437 | 0.437 |
| N | I | 1.00 | 6.00 | 6.00 | 6.00 | 6.00 | 1.00 | 1.00 | 6.00 | 10.0 |

1982-)83

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-) MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | 0.311 | 0.311 |
| MEAN | I | 0.30 | 0.298 | 0.317 | 0.322 | 0.313 | | | 0.25 | 0.25 |
| MIN | I | 0.30 | 0.25 | 0.25 | 0.25 | 0.25 | | | 0.370 | 0.370 |
| MAX | I | 0.30 | 0.35 | 0.40 | 0.40 | 0.370 | | | 7.00 | 7.00 |
| N | I | 1.00 | 6.00 | 6.00 | 6.00 | 6.00 | | | | |

1983-)84

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-) MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | 0.285 | |
| MEAN | I | 0.30 | 0.283 | 0.285 | 0.28 | 0.281 | | | 0.23 | |
| MIN | I | 0.30 | 0.27 | 0.21 | 0.22 | 0.23 | | | 0.319 | |
| MAX | I | 0.30 | 0.30 | 0.35 | 0.35 | 0.319 | | | 5.00 | |
| N | I | 1.00 | 4.00 | 4.00 | 4.00 | 4.00 | | | | |

LOUISA
COLTR Colour (true)

CALCULATION DATE: 84/07/16

1981-)82

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-) MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 8.92 | 10.2 | 9.67 | 9.50 | 9.79 | 11.3 | 9.00 | 9.07 | 9.94 |
| MIN | I | 8.92 | 4.00 | 5.00 | 6.00 | 4.66 | 11.3 | 9.00 | 4.66 | 4.66 |
| MAX | I | 8.92 | 19.0 | 17.0 | 14.0 | 14.0 | 11.3 | 9.00 | 16.0 | 16.0 |
| N | I | 1.00 | 6.00 | 6.00 | 6.00 | 6.00 | 1.00 | 1.00 | 0.00 | 10.0 |

1982-)83

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-) MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | 9.01 | 8.95 |
| MEAN | I | 11.5 | 8.00 | 9.17 | 9.67 | 8.61 | | | 4.59 | 4.59 |
| MIN | I | 11.5 | 5.00 | 5.00 | 4.00 | 4.59 | | | 11.5 | 11.3 |
| MAX | I | 11.5 | 12.0 | 12.0 | 12.0 | 11.3 | | | 7.00 | 7.00 |
| N | I | 1.00 | 6.00 | 6.00 | 6.00 | 6.00 | | | | |

1983-)84

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-) MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | 10.7 | |
| MEAN | I | 11.0 | 8.75 | 11.5 | 11.0 | 10.7 | | | 8.55 | |
| MIN | I | 11.0 | 6.00 | 9.00 | 9.00 | 8.55 | | | 13.6 | |
| MAX | I | 11.0 | 11.0 | 16.0 | 15.0 | 13.6 | | | 5.00 | |
| N | I | 1.00 | 4.00 | 4.00 | 4.00 | 4.00 | | | | |

LOUISA
CONDZ5 Conductivity (25 C)

CALCULATION DATE: 84/07/16

1981->82

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 30.3 | 30.0 | 30.3 | 30.7 | 30.3 | 30.3 | 31.0 | 30.3 | 30.3 |
| MIN | I | 30.3 | 30.0 | 30.0 | 30.0 | 30.0 | 30.3 | 31.0 | 30.0 | 29.5 |
| MAX | I | 30.3 | 30.0 | 31.0 | 31.0 | 30.5 | 30.3 | 31.0 | 30.5 | 31.0 |
| N | I | 1.00 | 6.00 | 6.00 | 6.00 | 6.00 | 1.00 | 1.00 | 8.00 | 10.0 |

1982->83

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 29.5 | 29.2 | 30.0 | 30.3 | 29.8 | | | 29.8 | 29.7 |
| MIN | I | 29.5 | 29.0 | 29.0 | 30.0 | 29.5 | | | 29.5 | 29.0 |
| MAX | I | 29.5 | 30.0 | 31.0 | 31.0 | 30.3 | | | 30.3 | 30.3 |
| N | I | 1.00 | 6.00 | 6.00 | 6.00 | 6.00 | | | 7.00 | 7.00 |

1983->84

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 29.0 | 28.8 | 29.0 | 29.5 | 29.2 | | | 29.1 | |
| MIN | I | 29.0 | 28.0 | 29.0 | 29.0 | 28.9 | | | 28.9 | |
| MAX | I | 29.0 | 29.0 | 29.0 | 30.0 | 29.4 | | | 29.4 | |
| N | I | 1.00 | 4.00 | 4.00 | 4.00 | 4.00 | | | 5.00 | |

LOUISA
DIC Dissolved Inorganic Carbon mg/L

CALCULATION DATE: 84/07/16

1981->82

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 0.469 | 0.533 | 0.567 | 0.703 | 0.634 | 0.00 | 0.00 | 0.634 | 0.673 |
| MIN | I | 0.469 | 0.40 | 0.40 | 0.40 | 0.420 | 0.00 | 0.00 | 0.420 | 0.420 |
| MAX | I | 0.469 | 0.00 | 0.90 | 1.60 | 1.10 | 0.00 | 0.00 | 1.10 | 1.10 |
| N | I | 1.00 | 6.00 | 6.00 | 6.00 | 6.00 | 1.00 | 1.00 | 8.00 | 10.0 |

1982->83

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 0.86 | 0.47 | 0.943 | 0.91 | 0.701 | | | 0.724 | 0.702 |
| MIN | I | 0.86 | 0.24 | 0.51 | 0.40 | 0.532 | | | 0.532 | 0.532 |
| MAX | I | 0.86 | 0.82 | 1.00 | 1.24 | 0.005 | | | 0.005 | 0.005 |
| N | I | 1.00 | 6.00 | 6.00 | 6.00 | 6.00 | | | 7.00 | 7.00 |

1983->84

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 0.71 | 0.353 | 0.630 | 0.02 | 0.619 | | | 0.637 | |
| MIN | I | 0.71 | 0.30 | 0.36 | 0.74 | 0.501 | | | 0.501 | |
| MAX | I | 0.71 | 0.43 | 0.00 | 0.91 | 0.670 | | | 0.71 | |
| N | I | 1.00 | 4.00 | 4.00 | 4.00 | 4.00 | | | 5.00 | |

LOUISA — CALCULATION DATE: 84/07/16
DOC Dissolved Organic Carbon mg/L

1981->82

| | | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 3.33 | 2.87 | 2.72 | 2.63 | 2.77 | 3.41 | 3.00 | 2.92 | 2.95 |
| MIN | I | 3.33 | 2.60 | 2.50 | 2.30 | 2.55 | 3.41 | 3.00 | 2.55 | 2.55 |
| MAX | I | 3.33 | 3.10 | 2.90 | 2.90 | 2.90 | 3.41 | 3.00 | 3.41 | 3.41 |
| N | I | 1.00 | 6.00 | 6.00 | 6.00 | 6.00 | 1.00 | 1.00 | 8.00 | 10.0 |

1982->83

| | | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 3.12 | 2.95 | 2.92 | 2.82 | 2.89 | | | 2.92 | 2.89 |
| MIN | I | 3.12 | 2.40 | 2.30 | 2.30 | 2.36 | | | 2.36 | 2.36 |
| MAX | I | 3.12 | 3.30 | 3.20 | 3.60 | 3.15 | | | 3.15 | 3.15 |
| N | I | 1.00 | 6.00 | 6.00 | 6.00 | 6.00 | | | 7.00 | 7.00 |

1983->84

| | | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 2.90 | 2.90 | 2.90 | 2.75 | 2.87 | | | 2.87 | |
| MIN | I | 2.90 | 2.70 | 2.80 | 2.70 | 2.77 | | | 2.77 | |
| MAX | I | 2.90 | 3.30 | 3.00 | 2.80 | 3.05 | | | 3.05 | |
| N | I | 1.00 | 4.00 | 4.00 | 4.00 | 4.00 | | | 5.00 | |

LOUISA — CALCULATION DATE: 84/07/16
FEUT Iron ug/L

1981->82

| | | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 20.0 | 26.0 | 20.0 | 20.0 | 23.4 | 30.0 | 40.0 | 23.9 | 26.5 |
| MIN | I | 20.0 | 20.0 | 20.0 | 20.0 | 20.0 | 30.0 | 40.0 | 20.0 | 20.0 |
| MAX | I | 20.0 | 40.0 | 20.0 | 20.0 | 30.6 | 30.0 | 40.0 | 30.6 | 40.0 |
| N | I | 1.00 | 5.00 | 5.00 | 5.00 | 5.00 | 1.00 | 1.00 | 7.00 | 9.00 |

1982->83

| | | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 31.2 | 26.7 | 23.3 | 29.2 | 27.2 | | | 27.8 | 26.2 |
| MIN | I | 31.2 | 20.0 | 20.0 | 20.0 | 22.8 | | | 22.0 | 20.0 |
| MAX | I | 31.2 | 35.0 | 30.0 | 35.0 | 34.1 | | | 34.1 | 34.1 |
| N | I | 1.00 | 6.00 | 6.00 | 6.00 | 6.00 | | | 7.00 | 7.00 |

1983->84

| | | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 20.0 | 25.0 | 17.5 | 15.0 | 18.6 | | | 18.9 | |
| MIN | I | 20.0 | 15.0 | 10.0 | 10.0 | 11.6 | | | 11.6 | |
| MAX | I | 20.0 | 35.0 | 25.0 | 20.0 | 25.5 | | | 25.5 | |
| N | I | 1.00 | 4.00 | 4.00 | 4.00 | 4.00 | | | 5.00 | |

LOUISA — CALCULATION DATE: 84/07/16
FFIDUR Fluoride ug/L

1983->84

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | | 48.1 | 47.8 | 48.0 | 48.0 | | | 48.0 | |
| MIN | I | | 46.5 | 46.3 | 45.7 | 46.2 | | | 46.2 | |
| MAX | I | | 50.5 | 48.6 | 49.2 | 49.5 | | | 49.5 | |
| N | I | | 3.00 | 3.00 | 3.00 | 3.00 | | | 3.00 | |

LOUISA — CALCULATION DATE: 84/07/16
KKUR Potassium mg/L

1981->82

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 0.45 | 0.443 | 0.45 | 0.45 | 0.448 | 0.45 | 0.35 | 0.449 | 0.439 |
| MIN | I | 0.45 | 0.40 | 0.40 | 0.40 | 0.40 | 0.45 | 0.35 | 0.40 | 0.35 |
| MAX | I | 0.45 | 0.40 | 0.50 | 0.50 | 0.492 | 0.45 | 0.35 | 0.492 | 0.492 |
| N | I | 1.00 | 6.00 | 6.00 | 6.00 | 6.00 | 1.00 | 1.00 | 8.00 | 10.0 |

1982->83

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 0.449 | 0.44 | 0.44 | 0.448 | 0.443 | | | 0.444 | 0.456 |
| MIN | I | 0.449 | 0.42 | 0.42 | 0.44 | 0.431 | | | 0.431 | 0.431 |
| MAX | I | 0.449 | 0.46 | 0.48 | 0.46 | 0.463 | | | 0.463 | 0.52 |
| N | I | 1.00 | 5.00 | 5.00 | 5.00 | 5.00 | | | 6.00 | 6.00 |

1983->84

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 0.52 | 0.48 | 0.47 | 0.475 | 0.475 | | | 0.484 | |
| MIN | I | 0.52 | 0.46 | 0.44 | 0.46 | 0.455 | | | 0.455 | |
| MAX | I | 0.52 | 0.50 | 0.50 | 0.50 | 0.50 | | | 0.52 | |
| N | I | 1.00 | 4.00 | 4.00 | 4.00 | 4.00 | | | 5.00 | |

LOUISA
MGUR Magnesium mg/L

CALCULATION DATE: 84/07/16

1981->82

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 0.739 | 0.653 | 0.695 | 0.69 | 0.68 | 0.616 | 0.70 | 0.679 | 0.683 |
| MIN | I | 0.739 | 0.50 | 0.65 | 0.64 | 0.627 | 0.616 | 0.70 | 0.616 | 0.616 |
| MAX | I | 0.739 | 0.75 | 0.75 | 0.75 | 0.75 | 0.616 | 0.70 | 0.75 | 0.75 |
| N | I | 1.00 | 6.00 | 6.00 | 6.00 | 6.00 | 1.00 | 1.00 | 8.00 | 10.0 |

1982->83

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 0.693 | 0.643 | 0.653 | 0.653 | 0.649 | | | 0.655 | 0.648 |
| MIN | I | 0.693 | 0.60 | 0.64 | 0.64 | 0.624 | | | 0.624 | 0.624 |
| MAX | I | 0.693 | 0.66 | 0.68 | 0.66 | 0.66 | | | 0.693 | 0.66 |
| N | I | 1.00 | 6.00 | 6.00 | 6.00 | 6.00 | | | 7.00 | 7.00 |

1983->84

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 0.64 | 0.645 | 0.655 | 0.66 | 0.654 | | | 0.651 | |
| MIN | I | 0.64 | 0.62 | 0.64 | 0.64 | 0.632 | | | 0.632 | |
| MAX | I | 0.64 | 0.66 | 0.68 | 0.68 | 0.667 | | | 0.667 | |
| N | I | 1.00 | 4.00 | 4.00 | 4.00 | 4.00 | | | 5.00 | |

LOUISA
MNUT Manganese ug/L

CALCULATION DATE: 84/07/16

1981->82

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 18.1 | 16.8 | 18.0 | 18.8 | 16.7 | 24.2 | 36.0 | 17.8 | 20.1 |
| MIN | I | 18.1 | 8.00 | 10.0 | 12.0 | 12.4 | 24.2 | 36.0 | 12.4 | 12.4 |
| MAX | I | 18.1 | 30.0 | 24.0 | 30.0 | 25.7 | 24.2 | 36.0 | 25.7 | 36.0 |
| N | I | 1.00 | 6.00 | 6.00 | 6.00 | 6.00 | 1.00 | 1.00 | 8.00 | 10.0 |

1982->83

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 22.5 | 13.5 | 12.7 | 17.3 | 14.9 | | | 16.0 | 14.3 |
| MIN | I | 22.5 | 7.00 | 9.00 | 10.0 | 10.9 | | | 10.9 | 10.9 |
| MAX | I | 22.5 | 22.0 | 19.0 | 37.0 | 25.1 | | | 25.1 | 25.1 |
| N | I | 1.00 | 6.00 | 6.00 | 6.00 | 6.00 | | | 7.00 | 7.00 |

1983->84

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 11.0 | 9.25 | 13.3 | 10.8 | 10.6 | | | 10.7 | |
| MIN | I | 11.0 | 5.00 | 9.00 | 7.00 | 7.32 | | | 7.32 | |
| MAX | I | 11.0 | 15.0 | 22.0 | 15.0 | 12.4 | | | 12.4 | |
| N | I | 1.00 | 4.00 | 4.00 | 4.00 | 4.00 | | | 5.00 | |

LOUISA — CALCULATION DATE: 84/07/16
NAUR Sodium mg/L

1981->82

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 0.715 | 0.775 | 0.725 | 0.717 | 0.746 | 0.70 | 0.00 | 0.736 | 0.745 |
| MIN | I | 0.715 | 0.60 | 0.50 | 0.50 | 0.564 | 0.70 | 0.00 | 0.564 | 0.564 |
| MAX | I | 0.715 | 0.90 | 0.85 | 0.80 | 0.831 | 0.70 | 0.00 | 0.831 | 0.831 |
| N | I | 1.00 | 6.00 | 6.00 | 6.00 | 6.00 | 1.00 | 1.00 | 8.00 | 10.0 |

1982->83

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 0.756 | 0.59 | 0.59 | 0.60 | 0.596 | | | 0.622 | 0.596 |
| MIN | I | 0.756 | 0.55 | 0.50 | 0.55 | 0.559 | | | 0.559 | 0.559 |
| MAX | I | 0.756 | 0.60 | 0.65 | 0.65 | 0.627 | | | 0.756 | 0.627 |
| N | I | 1.00 | 5.00 | 5.00 | 5.00 | 5.00 | | | 6.00 | 6.00 |

1983->84

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 0.60 | 0.575 | 0.563 | 0.525 | 0.554 | | | 0.563 | |
| MIN | I | 0.60 | 0.50 | 0.55 | 0.50 | 0.523 | | | 0.523 | |
| MAX | I | 0.60 | 0.65 | 0.60 | 0.55 | 0.602 | | | 0.602 | |
| N | I | 1.00 | 4.00 | 4.00 | 4.00 | 4.00 | | | 5.00 | |

LOUISA — CALCULATION DATE: 84/07/16
NHHTFR Ammonium as N ug/L

1981->82

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 11.0 | 5.00 | 13.0 | 7.50 | 8.44 | 3.21 | 0.00 | 8.21 | 8.53 |
| MIN | I | 11.0 | 1.00 | 3.00 | 1.00 | 3.39 | 3.21 | 0.00 | 3.21 | 3.21 |
| MAX | I | 11.0 | 8.00 | 18.0 | 16.0 | 12.7 | 3.21 | 0.00 | 12.7 | 12.7 |
| N | I | 1.00 | 6.00 | 6.00 | 6.00 | 6.00 | 1.00 | 1.00 | 8.00 | 10.0 |

1982->83

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 11.7 | 4.00 | 10.2 | 10.2 | 8.04 | | | 8.56 | 8.75 |
| MIN | I | 11.7 | 1.00 | 3.00 | 1.00 | 5.02 | | | 5.02 | 5.02 |
| MAX | I | 11.7 | 7.00 | 16.0 | 21.0 | 13.2 | | | 13.2 | 13.2 |
| N | I | 1.00 | 6.00 | 6.00 | 6.00 | 6.00 | | | 7.00 | 7.00 |

1983->84

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 13.0 | 5.00 | 10.3 | 10.5 | 11.7 | | | 12.0 | |
| MIN | I | 13.0 | 2.00 | 3.00 | 10.0 | 9.55 | | | 9.55 | |
| MAX | I | 13.0 | 8.00 | 18.0 | 19.0 | 15.2 | | | 15.2 | |
| N | I | 1.00 | 4.00 | 4.00 | 4.00 | 4.00 | | | 5.00 | |

LOUISA
NNOTFR Nitrate and Nitrite as N ug/L

CALCULATION DATE: 84/07/16

1981->82

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 166. | 108. | 158. | 201. | 149. | 151. | 160. | 152. | 157. |
| MIN | I | 166. | 98.0 | 120. | 185. | 138. | 151. | 160. | 138. | 138. |
| MAX | I | 166. | 135. | 195. | 215. | 156. | 151. | 160. | 166. | 195. |
| N | I | 1.00 | 6.00 | 6.00 | 6.00 | 6.00 | 1.00 | 1.00 | 8.00 | 10.0 |

1982->83

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 195. | 108. | 160. | 189. | 149. | | | 155. | 150. |
| MIN | I | 195. | 69.0 | 127. | 180. | 133. | | | 133. | 133. |
| MAX | I | 195. | 160. | 180. | 203. | 176. | | | 195. | 176. |
| N | I | 1.00 | 6.00 | 6.00 | 6.00 | 6.00 | | | 7.00 | 7.00 |

1983->84

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 156. | 92.3 | 136. | 168. | 129. | | | 135. | |
| MIN | I | 156. | 40.0 | 123. | 156. | 109. | | | 109. | |
| MAX | I | 156. | 148. | 146. | 164. | 150. | | | 156. | |
| N | I | 1.00 | 4.00 | 4.00 | 4.00 | 4.00 | | | 5.00 | |

LOUISA
NNTKUR Total Kjeldahl Nitrogen ug/L

CALCULATION DATE: 84/07/16

1981->82

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 233. | 194. | 188. | 175. | 188. | 194. | 170. | 195. | 189. |
| MIN | I | 233. | 175. | 175. | 145. | 180. | 194. | 170. | 180. | 166. |
| MAX | I | 233. | 205. | 205. | 195. | 197. | 194. | 170. | 233. | 233. |
| N | I | 1.00 | 6.00 | 6.00 | 6.00 | 6.00 | 1.00 | 1.00 | 8.00 | 10.0 |

1982->83

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 166. | 188. | 182. | 173. | 180. | | | 178. | 182. |
| MIN | I | 166. | 165. | 165. | 150. | 163. | | | 163. | 163. |
| MAX | I | 166. | 215. | 210. | 200. | 207. | | | 207. | 207. |
| N | I | 1.00 | 6.00 | 6.00 | 6.00 | 6.00 | | | 7.00 | 7.00 |

1983->84

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 190. | 188. | 181. | 176. | 180. | | | 182. | |
| MIN | I | 190. | 175. | 165. | 170. | 170. | | | 170. | |
| MAX | I | 190. | 195. | 200. | 185. | 191. | | | 191. | |
| N | I | 1.00 | 4.00 | 4.00 | 4.00 | 4.00 | | | 5.00 | |

LOUISA — CALCULATION DATE: 84/07/16

PH pH [-LOG(Hydrogen conc'n)]

1981->82

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 6.23 | 6.21 | 5.99 | 5.83 | 6.03 | 5.90 | 6.01 | 6.04 | 6.02 |
| MIN | I | 6.23 | 6.05 | 5.75 | 5.73 | 5.95 | 5.90 | 6.01 | 5.90 | 5.90 |
| MAX | I | 6.23 | 6.38 | 6.30 | 6.00 | 6.17 | 5.90 | 6.01 | 6.23 | 6.23 |
| N | I | 1.00 | 6.00 | 6.00 | 6.00 | 6.00 | 1.00 | 1.00 | 8.00 | 10.0 |

1982->83

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 5.90 | 6.20 | 5.86 | 5.76 | 5.99 | | | 5.90 | 5.90 |
| MIN | I | 5.90 | 6.04 | 5.52 | 5.62 | 5.88 | | | 5.88 | 5.88 |
| MAX | I | 5.90 | 6.50 | 6.09 | 5.83 | 6.11 | | | 6.11 | 6.11 |
| N | I | 1.00 | 6.00 | 6.00 | 6.00 | 6.00 | | | 7.00 | 7.00 |

1983->84

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 5.89 | 6.31 | 6.00 | 5.85 | 6.04 | | | 6.01 | |
| MIN | I | 5.89 | 6.05 | 5.93 | 5.75 | 5.87 | | | 5.87 | |
| MAX | I | 5.89 | 6.52 | 6.15 | 5.90 | 6.14 | | | 6.14 | |
| N | I | 1.00 | 4.00 | 4.00 | 4.00 | 4.00 | | | 5.00 | |

LOUISA — CALCULATION DATE: 84/07/16

PPUT Total Phosphorous ug/L

1981->82

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 3.32 | 3.92 | 3.51 | 3.35 | 3.54 | 3.31 | 3.77 | 3.48 | 3.53 |
| MIN | I | 3.32 | 2.65 | 3.00 | 2.37 | 2.66 | 3.31 | 3.77 | 2.66 | 2.66 |
| MAX | I | 3.32 | 5.53 | 4.10 | 3.83 | 4.78 | 3.31 | 3.77 | 4.78 | 4.78 |
| N | I | 1.00 | 6.00 | 5.00 | 5.00 | 5.00 | 1.00 | 1.00 | 7.00 | 9.00 |

1982->83

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 3.66 | 3.87 | 3.93 | 3.47 | 3.73 | | | 3.72 | 3.86 |
| MIN | I | 3.66 | 2.67 | 3.67 | 3.17 | 3.32 | | | 3.32 | 3.32 |
| MAX | I | 3.66 | 5.03 | 4.27 | 3.80 | 4.31 | | | 4.31 | 4.70 |
| N | I | 1.00 | 6.00 | 6.00 | 6.00 | 6.00 | | | 7.00 | 7.00 |

1983->84

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 4.70 | 3.33 | 4.36 | 3.63 | 3.85 | | | 4.02 | |
| MIN | I | 4.70 | 2.73 | 3.40 | 3.17 | 3.16 | | | 3.16 | |
| MAX | I | 4.70 | 3.73 | 5.63 | 4.00 | 4.69 | | | 4.70 | |
| N | I | 1.00 | 4.00 | 4.00 | 4.00 | 4.00 | | | 5.00 | |

LOUISA
SIO3UR Silicates mg/L

CALCULATION DATE: 84/07/16

1981->82

| | I I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 1.26 | 1.29 | 1.37 | 1.49 | 1.37 | 1.41 | 1.40 | 1.36 | 1.36 |
| MIN | I | 1.26 | 1.15 | 1.25 | 1.40 | 1.26 | 1.41 | 1.40 | 1.26 | 1.26 |
| MAX | I | 1.26 | 1.35 | 1.55 | 1.65 | 1.44 | 1.41 | 1.40 | 1.44 | 1.44 |
| N | I | 1.00 | 6.00 | 6.00 | 6.00 | 6.00 | 1.00 | 1.00 | 8.00 | 10.0 |

1982->83

| | I I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 1.36 | 1.21 | 1.32 | 1.41 | 1.31 | | | 1.32 | 1.33 |
| MIN | I | 1.36 | 1.15 | 1.23 | 1.36 | 1.26 | | | 1.26 | 1.26 |
| MAX | I | 1.36 | 1.34 | 1.39 | 1.46 | 1.41 | | | 1.41 | 1.45 |
| N | I | 1.00 | 6.00 | 6.00 | 6.00 | 6.00 | | | 7.00 | 7.00 |

1983->84

| | I I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 1.45 | 0.955 | 1.30 | 1.48 | 1.28 | | | 1.31 | |
| MIN | I | 1.45 | 0.12 | 1.13 | 1.39 | 1.02 | | | 1.02 | |
| MAX | I | 1.45 | 1.30 | 1.42 | 1.59 | 1.45 | | | 1.45 | |
| N | I | 1.00 | 4.00 | 4.00 | 4.00 | 4.00 | | | 5.00 | |

LOUISA
SSO4UR Sulphate as SO4 mg/L

CALCULATION DATE: 84/07/16

1981->82

| | I I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 8.10 | 8.42 | 8.57 | 8.55 | 8.50 | 8.50 | 8.80 | 8.51 | 8.56 |
| MIN | I | 8.10 | 8.00 | 8.00 | 7.90 | 7.96 | 8.50 | 8.80 | 7.96 | 7.96 |
| MAX | I | 8.10 | 8.90 | 8.90 | 9.00 | 8.95 | 8.50 | 8.80 | 8.95 | 8.95 |
| N | I | 1.00 | 6.00 | 6.00 | 6.00 | 6.00 | 1.00 | 1.00 | 8.00 | 10.0 |

1982->83

| | I I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 8.71 | 7.96 | 7.99 | 8.04 | 7.99 | | | 8.10 | 8.11 |
| MIN | I | 8.71 | 7.56 | 7.62 | 7.61 | 7.58 | | | 7.58 | 7.58 |
| MAX | I | 8.71 | 8.30 | 8.30 | 8.40 | 8.35 | | | 8.71 | 8.84 |
| N | I | 1.00 | 6.00 | 6.00 | 6.00 | 6.00 | | | 7.00 | 7.00 |

1983->84

| | I I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 8.84 | 8.04 | 7.94 | 8.06 | 8.02 | | | 8.18 | |
| MIN | I | 8.84 | 8.00 | 7.79 | 7.94 | 7.95 | | | 7.95 | |
| MAX | I | 8.84 | 8.09 | 8.11 | 8.21 | 8.10 | | | 8.84 | |
| N | I | 1.00 | 4.00 | 4.00 | 4.00 | 4.00 | | | 5.00 | |

NUNIKANI

Calculation date: 84/07/16

1983->84

| | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|
| START | 830425 | 830521 | 830521 | 830521 | 830521 | 831101 | | 830425 | |
| END | 830520 | 831031 | 831031 | 831031 | 831031 | 831110 | | 831110 | |

ALKTI Alkalinity, TIA as CaCO3 mg/L

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 1.30 | 1.66 | 1.48 | 1.54 | 1.57 | | | 1.52 | |
| MIN | I | 1.30 | 1.22 | 1.06 | 1.21 | 1.13 | | | 1.13 | |
| MAX | I | 1.30 | 1.87 | 1.82 | 2.06 | 1.87 | | | 1.87 | |
| N | I | 1.00 | 5.00 | 5.00 | 5.00 | 5.00 | | | 6.00 | |

ALUT Aluminum ug/L

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 37.8 | 12.8 | 32.4 | 43.8 | 23.6 | | | 25.9 | |
| MIN | I | 37.8 | 6.00 | 19.0 | 32.0 | 13.1 | | | 13.1 | |
| MAX | I | 37.8 | 19.0 | 43.0 | 58.0 | 35.0 | | | 37.8 | |
| N | I | 1.00 | 5.00 | 5.00 | 5.00 | 5.00 | | | 6.00 | |

CAUR Calcium mg/L

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 2.66 | 2.65 | 2.60 | 2.60 | 2.63 | | | 2.64 | |
| MIN | I | 2.66 | 2.50 | 2.50 | 2.50 | 2.50 | | | 2.50 | |
| MAX | I | 2.66 | 2.90 | 2.80 | 2.80 | 2.86 | | | 2.86 | |
| N | I | 1.00 | 4.00 | 5.00 | 5.00 | 4.00 | | | 5.00 | |

CLIDUR Chloride mg/L

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 0.40 | 0.353 | 0.358 | 0.40 | 0.35 | | | 0.36 | |
| MIN | I | 0.40 | 0.29 | 0.28 | 0.32 | 0.305 | | | 0.305 | |
| MAX | I | 0.40 | 0.40 | 0.46 | 0.46 | 0.40 | | | 0.40 | |
| N | I | 1.00 | 4.00 | 5.00 | 5.00 | 4.00 | | | 5.00 | |

COLTR Colour (true)

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 10.0 | 6.80 | 10.2 | 12.0 | 8.64 | | | 8.87 | |
| MIN | I | 10.0 | 3.00 | 7.00 | 8.00 | 5.79 | | | 5.79 | |
| MAX | I | 10.0 | 11.0 | 14.0 | 18.0 | 10.8 | | | 10.8 | |
| N | I | 1.00 | 5.00 | 5.00 | 5.00 | 5.00 | | | 6.00 | |

COND25 Conductivity (25 C)

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 29.1 | 29.6 | 29.9 | 30.3 | 29.7 | | | 29.6 | |
| MIN | I | 29.1 | 29.0 | 29.0 | 30.0 | 29.1 | | | 29.1 | |
| MAX | I | 29.1 | 30.0 | 31.0 | 31.0 | 30.5 | | | 30.5 | |
| N | I | 1.00 | 5.00 | 5.00 | 5.00 | 5.00 | | | 6.00 | |

Table 24 Nunikani Lake

NUNIKANI
1983->84

CALCULATION DATE: 84/07/16

DIC Dissolved Inorganic Carbon mg/L

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 0.727 | 0.504 | 1.07 | 1.81 | 0.823 | | | 0.807 | |
| MIN | I | 0.727 | 0.45 | 0.63 | 1.20 | 0.658 | | | 0.658 | |
| MAX | I | 0.727 | 0.55 | 1.71 | 2.63 | 1.01 | | | 1.01 | |
| N | I | 1.00 | 5.00 | 5.00 | 5.00 | 5.00 | | | 6.00 | |

DOC Dissolved Organic Carbon mg/L

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 2.44 | 2.43 | 2.48 | 2.40 | 2.42 | | | 2.43 | |
| MIN | I | 2.44 | 2.30 | 2.20 | 2.20 | 2.22 | | | 2.22 | |
| MAX | I | 2.44 | 2.60 | 2.80 | 2.60 | 2.67 | | | 2.67 | |
| N | I | 1.00 | 4.00 | 5.00 | 5.00 | 4.00 | | | 5.00 | |

FEUT Iron ug/L

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 18.9 | 23.8 | 40.0 | 138. | 26.7 | | | 25.1 | |
| MIN | I | 18.9 | 18.0 | 15.0 | 20.0 | 18.6 | | | 18.6 | |
| MAX | I | 18.9 | 35.0 | 95.0 | 450. | 37.4 | | | 37.4 | |
| N | I | 1.00 | 4.00 | 5.00 | 5.00 | 4.00 | | | 5.00 | |

FFIDUR Fluoride ug/L

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | | 49.5 | 45.1 | 46.4 | 46.0 | | | 46.0 | |
| MIN | I | | 47.5 | 38.3 | 38.0 | 40.5 | | | 40.5 | |
| MAX | I | | 51.2 | 48.0 | 50.8 | 49.8 | | | 49.8 | |
| N | I | | 3.00 | 4.00 | 4.00 | 3.00 | | | 3.00 | |

KKUR Potassium mg/L

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 0.532 | 0.525 | 0.50 | 0.48 | 0.509 | | | 0.513 | |
| MIN | I | 0.532 | 0.52 | 0.50 | 0.40 | 0.495 | | | 0.495 | |
| MAX | I | 0.532 | 0.54 | 0.50 | 0.52 | 0.522 | | | 0.532 | |
| N | I | 1.00 | 4.00 | 5.00 | 5.00 | 4.00 | | | 5.00 | |

MGUR Magnesium mg/L

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 0.577 | 0.66 | 0.628 | 0.632 | 0.647 | | | 0.633 | |
| MIN | I | 0.577 | 0.64 | 0.60 | 0.62 | 0.631 | | | 0.577 | |
| MAX | I | 0.577 | 0.78 | 0.66 | 0.64 | 0.674 | | | 0.674 | |
| N | I | 1.00 | 4.00 | 5.00 | 5.00 | 4.00 | | | 5.00 | |

MNUT Manganese ug/L

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 7.93 | 7.00 | 25.8 | 44.6 | 11.8 | | | 11.0 | |
| MIN | I | 7.93 | 4.00 | 9.00 | 7.00 | 7.22 | | | 7.22 | |
| MAX | I | 7.93 | 10.0 | 67.0 | 120. | 21.1 | | | 21.1 | |
| N | I | 1.00 | 4.00 | 5.00 | 5.00 | 4.00 | | | 5.00 | |

Table 24 con't

NUNIKANI
1983->84

CALCULATION DATE: 84/07/16

NAUR Sodium mg/L

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 0.50 | 0.563 | 0.54 | 0.54 | 0.553 | | | 0.559 | |
| MIN | I | 0.50 | 0.50 | 0.50 | 0.50 | 0.512 | | | 0.512 | |
| MAX | I | 0.50 | 0.65 | 0.60 | 0.55 | 0.623 | | | 0.623 | |
| N | I | 1.00 | 4.00 | 5.00 | 5.00 | 4.00 | | | 5.00 | |

NNHTFR Ammonium as N ug/L

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 11.7 | 4.60 | 15.6 | 18.0 | 10.0 | | | 10.3 | |
| MIN | I | 11.7 | 1.00 | 9.00 | 1.00 | 5.31 | | | 5.31 | |
| MAX | I | 11.7 | 10.0 | 22.0 | 34.0 | 14.0 | | | 14.0 | |
| N | I | 1.00 | 5.00 | 5.00 | 5.00 | 5.00 | | | 6.00 | |

NNOTFR Nitrate and Nitrite as N ug/L

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 144. | 64.6 | 120. | 179. | 93.7 | | | 102. | |
| MIN | I | 144. | 30.0 | 103. | 147. | 74.6 | | | 74.6 | |
| MAX | I | 144. | 120. | 143. | 225. | 126. | | | 144. | |
| N | I | 1.00 | 5.00 | 5.00 | 5.00 | 5.00 | | | 6.00 | |

NNTKUR Total Kjeldahl Nitrogen ug/L

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 171. | 171. | 167. | 173. | 169. | | | 170. | |
| MIN | I | 171. | 160. | 160. | 170. | 163. | | | 163. | |
| MAX | I | 171. | 190. | 180. | 180. | 185. | | | 185. | |
| N | I | 1.00 | 5.00 | 5.00 | 5.00 | 5.00 | | | 6.00 | |

PH pH [-LOG(Hydrogen conc'n)]

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 6.12 | 6.41 | 5.90 | 5.73 | 6.14 | | | 6.13 | |
| MIN | I | 6.12 | 6.18 | 5.66 | 5.63 | 5.79 | | | 5.79 | |
| MAX | I | 6.12 | 6.58 | 6.19 | 5.80 | 6.24 | | | 6.24 | |
| N | I | 1.00 | 5.00 | 5.00 | 5.00 | 5.00 | | | 6.00 | |

PPUT Total Phosphorous ug/L

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 5.29 | 3.72 | 4.89 | 5.75 | 4.32 | | | 4.48 | |
| MIN | I | 5.29 | 3.43 | 3.93 | 4.77 | 4.10 | | | 4.10 | |
| MAX | I | 5.29 | 4.00 | 5.73 | 7.03 | 4.69 | | | 5.29 | |
| N | I | 1.00 | 5.00 | 5.00 | 5.00 | 5.00 | | | 6.00 | |

SIO3UR Silicates mg/L

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 0.979 | 0.72 | 0.858 | 1.19 | 0.816 | | | 0.849 | |
| MIN | I | 0.979 | 0.63 | 0.76 | 1.04 | 0.758 | | | 0.758 | |
| MAX | I | 0.979 | 0.82 | 0.93 | 1.30 | 0.88 | | | 0.979 | |
| N | I | 1.00 | 4.00 | 5.00 | 5.00 | 4.00 | | | 5.00 | |

Table 24 con't

NUNIKANI
1983-)84

CALCULATION DATE: 84/07/16

SSO4UR Sulphate as SO4 mg/L

| | I I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-) MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 7.76 | 8.06 | 7.83 | 7.74 | 7.96 | | | 7.92 | |
| MIN | I | 7.76 | 7.80 | 7.70 | 7.45 | 7.83 | | | 7.76 | |
| MAX | I | 7.76 | 8.24 | 8.03 | 7.95 | 8.11 | | | 8.11 | |
| N | I | 1.00 | 4.00 | 5.00 | 5.00 | 4.00 | | | 5.00 | |

Table 24 con't

SHERBORNE

Calculation date: 84/07/16

1982->83

| | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|
| START | 820429 | 820601 | 820601 | 820601 | 820601 | 821111 | | 820429 | 820601 |
| END | 820531 | 821110 | 821110 | 821110 | 821110 | 821211 | | 821211 | 830531 |

1983->84

| | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|
| START | 830425 | 830521 | 830521 | 830521 | 830521 | 831101 | | 830425 | |
| END | 830520 | 831031 | 831031 | 831031 | 831031 | 831110 | | 831110 | |

SHERBORNE — CALCULATION DATE: 84/07/16

ALKTI Alkalinity, TIA as CaCO3 mg/L

1982->83

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | | 0.915 | 1.37 | 1.36 | 1.19 | | | 1.19 | 1.15 |
| MIN | I | | 0.80 | 1.16 | 1.20 | 1.07 | | | 1.07 | 1.02 |
| MAX | I | | 1.05 | 1.48 | 1.58 | 1.34 | | | 1.34 | 1.34 |
| N | I | | 4.00 | 3.00 | 3.00 | 3.00 | | | 3.00 | 4.00 |

1983->84

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 1.02 | 1.11 | 1.36 | 1.32 | 1.22 | 1.46 | | 1.23 | |
| MIN | I | 1.02 | 0.92 | 0.80 | 1.10 | 0.922 | 1.46 | | 0.922 | |
| MAX | I | 1.02 | 1.27 | 1.75 | 1.58 | 1.44 | 1.46 | | 1.46 | |
| N | I | 1.00 | 5.00 | 5.00 | 5.00 | 5.00 | 1.00 | | 7.00 | |

SHERBORNE — CALCULATION DATE: 84/07/16

ALUT Aluminum ug/L

1982->83

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | | 42.5 | 34.0 | 41.3 | 35.3 | | | 35.5 | 40.7 |
| MIN | I | | 25.0 | 29.0 | 31.0 | 27.7 | | | 27.7 | 27.7 |
| MAX | I | | 70.0 | 37.0 | 52.0 | 42.0 | | | 42.0 | 57.1 |
| N | I | | 4.00 | 3.00 | 3.00 | 3.00 | | | 3.00 | 4.00 |

1983->84

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 57.1 | 19.0 | 36.0 | 44.4 | 28.4 | 22.5 | | 31.6 | |
| MIN | I | 57.1 | 6.00 | 21.0 | 18.0 | 16.2 | 22.5 | | 16.2 | |
| MAX | I | 57.1 | 40.0 | 50.0 | 67.0 | 38.9 | 22.5 | | 57.1 | |
| N | I | 1.00 | 5.00 | 5.00 | 5.00 | 5.00 | 1.00 | | 7.00 | |

Table 25 Sherborne Lake

SHERBORNE — CALCULATION DATE: 84/07/16
CAUR Calcium mg/L

1982-)83

| | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-) MAY 31 |
|---|---|---|---|---|---|---|---|---|---|
| MEAN | | 2.53 | 2.53 | 2.57 | 2.55 | | | 2.55 | 2.51 |
| MIN | | 2.40 | 2.50 | 2.40 | 2.50 | | | 2.50 | 2.40 |
| MAX | | 2.60 | 2.60 | 2.70 | 2.50 | | | 2.50 | 2.50 |
| N | | 4.00 | 3.00 | 3.00 | 3.00 | | | 3.00 | 4.00 |

1983-)84

| | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-) MAY 31 |
|---|---|---|---|---|---|---|---|---|---|
| MEAN | 2.40 | 2.26 | 2.34 | 2.42 | 2.31 | 2.31 | | 2.32 | |
| MIN | 2.40 | 2.10 | 2.20 | 2.30 | 2.10 | 2.31 | | 2.10 | |
| MAX | 2.40 | 2.40 | 2.50 | 2.70 | 2.43 | 2.31 | | 2.43 | |
| N | 1.00 | 5.00 | 5.00 | 5.00 | 5.00 | 1.00 | | 7.00 | |

SHERBORNE — CALCULATION DATE: 84/07/16
CLIDUR Chloride mg/L

1982-)83

| | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-) MAY 31 |
|---|---|---|---|---|---|---|---|---|---|
| MEAN | | 0.367 | 0.40 | 0.417 | 0.378 | | | 0.378 | 0.372 |
| MIN | | 0.35 | 0.40 | 0.40 | 0.376 | | | 0.376 | 0.36 |
| MAX | | 0.40 | 0.40 | 0.45 | 0.379 | | | 0.379 | 0.379 |
| N | | 3.00 | 3.00 | 3.00 | 2.00 | | | 2.00 | 3.00 |

1983-)84

| | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-) MAY 31 |
|---|---|---|---|---|---|---|---|---|---|
| MEAN | 0.36 | 0.400 | 0.388 | 0.344 | 0.303 | 0.363 | | 0.377 | |
| MIN | 0.36 | 0.29 | 0.30 | 0.26 | 0.295 | 0.363 | | 0.295 | |
| MAX | 0.36 | 0.70 | 0.45 | 0.40 | 0.505 | 0.363 | | 0.505 | |
| N | 1.00 | 5.00 | 5.00 | 5.00 | 5.00 | 1.00 | | 7.00 | |

SHERBORNE — CALCULATION DATE: 84/07/16
COLTR Colour (true)

1982-)83

| | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-) MAY 31 |
|---|---|---|---|---|---|---|---|---|---|
| MEAN | | 8.50 | 7.67 | 7.67 | 7.85 | | | 7.85 | 8.33 |
| MIN | | 8.00 | 6.00 | 7.00 | 7.26 | | | 7.20 | 7.20 |
| MAX | | 9.00 | 9.00 | 8.00 | 8.35 | | | 8.35 | 9.75 |
| N | | 4.00 | 3.00 | 3.00 | 3.00 | | | 3.00 | 4.00 |

1983-)84

| | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-) MAY 31 |
|---|---|---|---|---|---|---|---|---|---|
| MEAN | 9.75 | 7.80 | 10.6 | 13.0 | 9.63 | 8.50 | | 9.48 | |
| MIN | 9.75 | 4.00 | 7.00 | 10.0 | 6.20 | 8.50 | | 6.20 | |
| MAX | 9.75 | 13.0 | 14.0 | 18.0 | 13.2 | 8.50 | | 13.2 | |
| N | 1.00 | 5.00 | 5.00 | 5.00 | 5.00 | 1.00 | | 7.00 | |

SHERBORNE
COND25 Conductivity (25 C)

CALCULATION DATE: 84/07/16

1982->83

| | I I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | | 26.0 | 28.0 | 29.3 | 27.9 | | | 27.9 | 27.7 |
| MIN | I | | 26.0 | 28.0 | 29.0 | 27.8 | | | 27.8 | 26.9 |
| MAX | I | | 27.0 | 28.0 | 30.0 | 28.0 | | | 28.0 | 28.0 |
| N | I | | 4.00 | 3.00 | 3.00 | 3.00 | | | 3.00 | 4.00 |

1983->84

| | I I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 26.9 | 27.0 | 28.0 | 28.5 | 27.7 | 26.0 | | 27.4 | |
| MIN | I | 26.9 | 26.0 | 27.0 | 28.0 | 26.0 | 26.0 | | 26.0 | |
| MAX | I | 26.9 | 29.2 | 29.0 | 29.3 | 29.4 | 26.0 | | 29.4 | |
| N | I | 1.00 | 5.00 | 5.00 | 5.00 | 5.00 | 1.00 | | 7.00 | |

SHERBORNE
DIC Dissolved Inorganic Carbon mg/L

CALCULATION DATE: 84/07/16

1982->83

| | I I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | | 0.60 | 0.60 | 0.50 | 0.616 | | | 0.616 | 0.686 |
| MIN | I | | 0.40 | 0.60 | 0.40 | 0.60 | | | 0.60 | 0.60 |
| MAX | I | | 0.80 | 0.60 | 0.60 | 0.631 | | | 0.631 | 0.826 |
| N | I | | 3.00 | 2.00 | 2.00 | 2.00 | | | 2.00 | 3.00 |

1983->84

| | I I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 0.826 | 0.396 | 1.05 | 1.61 | 0.831 | 0.904 | | 0.841 | |
| MIN | I | 0.826 | 0.35 | 0.75 | 1.37 | 0.741 | 0.904 | | 0.741 | |
| MAX | I | 0.826 | 0.44 | 1.68 | 2.04 | 0.926 | 0.904 | | 0.926 | |
| N | I | 1.00 | 5.00 | 5.00 | 5.00 | 5.00 | 1.00 | | 7.00 | |

SHERBORNE
DOC Dissolved Organic Carbon mg/L

CALCULATION DATE: 84/07/16

1982->83

| | I I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | | 2.45 | 2.23 | 2.07 | 2.27 | | | 2.27 | 2.26 |
| MIN | I | | 2.40 | 2.10 | 2.00 | 2.23 | | | 2.23 | 2.23 |
| MAX | I | | 2.50 | 2.30 | 2.10 | 2.30 | | | 2.30 | 2.30 |
| N | I | | 4.00 | 3.00 | 3.00 | 3.00 | | | 3.00 | 4.00 |

1983->84

| | I I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 2.24 | 2.56 | 2.36 | 2.16 | 2.42 | 2.17 | | 2.36 | |
| MIN | I | 2.24 | 2.40 | 2.20 | 2.00 | 2.25 | 2.17 | | 2.17 | |
| MAX | I | 2.24 | 2.70 | 2.50 | 2.40 | 2.58 | 2.17 | | 2.50 | |
| N | I | 1.00 | 5.00 | 5.00 | 5.00 | 5.00 | 1.00 | | 7.00 | |

SHERBORNE — CALCULATION DATE: 84/07/16
FEUT Iron ug/L

1982->83

| | I I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | | 50.5 | 41.3 | 74.3 | 50.0 | | | 50.0 | 57.9 |
| MIN | I | | 32.0 | 39.0 | 70.0 | 48.9 | | | 48.9 | 48.9 |
| MAX | I | | 90.0 | 45.0 | 70.0 | 52.2 | | | 52.2 | 79.3 |
| N | I | | 4.00 | 3.00 | 3.00 | 3.00 | | | 3.00 | 4.00 |

1983->84

| | I I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 79.3 | 25.0 | 50.0 | 153. | 55.0 | 127. | | 68.0 | |
| MIN | I | 79.3 | 15.0 | 30.0 | 90.0 | 36.1 | 127. | | 36.1 | |
| MAX | I | 79.3 | 35.0 | 130. | 332. | 90.3 | 127. | | 127. | |
| N | I | 1.00 | 5.00 | 5.00 | 5.00 | 5.00 | 1.00 | | 7.00 | |

SHERBORNE — CALCULATION DATE: 84/07/16
FFIDUR Fluoride ug/L

1983->84

| | I I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | | 52.0 | 49.5 | 47.7 | 50.6 | 51.7 | | 50.0 | |
| MIN | I | | 47.9 | 45.4 | 45.5 | 48.2 | 51.7 | | 48.2 | |
| MAX | I | | 56.0 | 51.9 | 48.9 | 53.0 | 51.7 | | 53.0 | |
| N | I | | 4.00 | 4.00 | 4.00 | 4.00 | 1.00 | | 5.00 | |

SHERBORNE — CALCULATION DATE: 84/07/16
KKUR Potassium mg/L

1982->83

| | I I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | | 0.31 | 0.333 | 0.333 | 0.321 | | | 0.321 | 0.331 |
| MIN | I | | 0.28 | 0.32 | 0.32 | 0.301 | | | 0.301 | 0.301 |
| MAX | I | | 0.34 | 0.34 | 0.34 | 0.34 | | | 0.34 | 0.36 |
| N | I | | 4.00 | 3.00 | 3.00 | 3.00 | | | 3.00 | 4.00 |

1983->84

| | I I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 0.36 | 0.336 | 0.332 | 0.33 | 0.331 | 0.302 | | 0.331 | |
| MIN | I | 0.36 | 0.32 | 0.32 | 0.32 | 0.323 | 0.302 | | 0.302 | |
| MAX | I | 0.36 | 0.34 | 0.36 | 0.34 | 0.34 | 0.302 | | 0.36 | |
| N | I | 1.00 | 5.00 | 5.00 | 4.00 | 4.00 | 1.00 | | 6.00 | |

SHERBORNE
MGUR Magnesium mg/L

CALCULATION DATE: 84/07/16

1982-)83

| | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-) MAY 31 |
|---|---|---|---|---|---|---|---|---|---|
| MEAN | | 0.605 | 0.633 | 0.64 | 0.624 | | | 0.624 | 0.604 |
| MIN | | 0.60 | 0.62 | 0.62 | 0.613 | | | 0.613 | 0.545 |
| MAX | | 0.62 | 0.64 | 0.66 | 0.632 | | | 0.632 | 0.632 |
| N | | 4.00 | 3.00 | 3.00 | 3.00 | | | 3.00 | 4.00 |

1983-)84

| | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-) MAY 31 |
|---|---|---|---|---|---|---|---|---|---|
| MEAN | 0.545 | 0.568 | 0.58 | 0.596 | 0.577 | 0.547 | | 0.568 | |
| MIN | 0.545 | 0.50 | 0.54 | 0.56 | 0.519 | 0.547 | | 0.519 | |
| MAX | 0.545 | 0.60 | 0.60 | 0.62 | 0.604 | 0.547 | | 0.604 | |
| N | 1.00 | 5.00 | 5.00 | 5.00 | 5.00 | 1.00 | | 7.00 | |

SHERBORNE
MNUT Manganese ug/L

CALCULATION DATE: 84/07/16

1982-)83

| | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-) MAY 31 |
|---|---|---|---|---|---|---|---|---|---|
| MEAN | | 42.8 | 38.8 | 42.8 | 43.6 | | | 43.6 | 41.2 |
| MIN | | 29.8 | 32.8 | 38.8 | 34.0 | | | 34.0 | 33.9 |
| MAX | | 55.8 | 52.5 | 52.8 | 53.3 | | | 53.3 | 53.3 |
| N | | 4.00 | 3.00 | 3.00 | 3.00 | | | 3.00 | 4.00 |

1983-)84

| | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-) MAY 31 |
|---|---|---|---|---|---|---|---|---|---|
| MEAN | 33.9 | 24.2 | 77.8 | 83.6 | 50.5 | 70.3 | | 51.8 | |
| MIN | 33.9 | 9.00 | 28.8 | 40.8 | 30.4 | 70.3 | | 30.4 | |
| MAX | 33.9 | 42.8 | 138. | 150. | 74.8 | 70.3 | | 74.8 | |
| N | 1.00 | 5.00 | 5.00 | 5.00 | 5.00 | 1.00 | | 7.00 | |

SHERBORNE
NAUR Sodium mg/L

CALCULATION DATE: 84/07/16

1982-)83

| | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-) MAY 31 |
|---|---|---|---|---|---|---|---|---|---|
| MEAN | | 0.563 | 0.583 | 0.633 | 0.583 | | | 0.583 | 0.577 |
| MIN | | 0.50 | 0.55 | 0.55 | 0.529 | | | 0.529 | 0.529 |
| MAX | | 0.60 | 0.65 | 0.75 | 0.658 | | | 0.658 | 0.658 |
| N | | 4.00 | 3.00 | 3.00 | 3.00 | | | 3.00 | 4.00 |

1983-)84

| | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-) MAY 31 |
|---|---|---|---|---|---|---|---|---|---|
| MEAN | 0.558 | 0.51 | 0.50 | 0.52 | 0.508 | 0.45 | | 0.507 | |
| MIN | 0.558 | 0.50 | 0.50 | 0.50 | 0.50 | 0.45 | | 0.45 | |
| MAX | 0.558 | 0.55 | 0.50 | 0.55 | 0.533 | 0.45 | | 0.558 | |
| N | 1.00 | 5.00 | 5.00 | 5.00 | 5.00 | 1.00 | | 7.00 | |

SHERBORNE — CALCULATION DATE: 84/07/16
NHNTFR Ammonium as N ug/L — DETECTION LIMIT USED:1

1982-)83

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-) MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | | 8.00 | 8.33 | 14.0 | 9.95 | | | 9.95 | 10.2 |
| MIN | I | | 6.00 | 7.00 | 11.0 | 8.91 | | | 8.91 | 8.91 |
| MAX | I | | 13.0 | 11.0 | 16.0 | 11.3 | | | 11.3 | 11.3 |
| N | I | | 4.00 | 3.00 | 3.00 | 3.00 | | | 3.00 | 4.00 |

1983-)84

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-) MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 10.9 | 6.00L | 10.0 | 16.2 | 9.04L | 11.6 | | 9.60L | |
| MIN | I | 10.9 | 1.00 | 5.00 | 6.00 | 4.60 | 11.6 | | 4.60 | |
| MAX | I | 10.9 | 10.0 | 14.0 | 24.0 | 13.0 | 11.6 | | 13.0 | |
| N | I | 1.00 | 5.00 | 5.00 | 5.00 | 5.00 | 1.00 | | 7.00 | |

SHERBORNE — CALCULATION DATE: 84/07/16
NNOTFR Nitrate and Nitrite as N ug/L — DETECTION LIMIT USED:2

1982-)83

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-) MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | | 78.0 | 81.7 | 148. | 98.6 | | | 98.6 | 104. |
| MIN | I | | 35.0 | 60.0 | 135. | 80.6 | | | 80.6 | 80.6 |
| MAX | I | | 110. | 105. | 160. | 115. | | | 115. | 121. |
| N | I | | 4.00 | 3.00 | 3.00 | 3.00 | | | 3.00 | 4.00 |

1983-)84

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-) MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 121. | 30.2L | 81.4 | 155. | 68.1L | 61.4 | | 74.6L | |
| MIN | I | 121. | 2.00 | 40.0 | 127. | 46.0 | 61.4 | | 46.0 | |
| MAX | I | 121. | 95.0 | 100. | 190. | 100. | 61.4 | | 121. | |
| N | I | 1.00 | 5.00 | 5.00 | 5.00 | 5.00 | 1.00 | | 7.00 | |

SHERBORNE — CALCULATION DATE: 84/07/16
NNTKUR Total Kjeldahl Nitrogen ug/L

1982-)83

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-) MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | | 173. | 172. | 163. | 169. | | | 169. | 166. |
| MIN | I | | 160. | 150. | 155. | 156. | | | 156. | 156. |
| MAX | I | | 185. | 195. | 170. | 182. | | | 182. | 182. |
| N | I | | 4.00 | 3.00 | 3.00 | 3.00 | | | 3.00 | 4.00 |

1983-)84

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-) MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 156. | 174. | 182. | 162. | 175. | 183. | | 173. | |
| MIN | I | 156. | 150. | 145. | 155. | 153. | 183. | | 153. | |
| MAX | I | 156. | 240. | 285. | 170. | 244. | 183. | | 244. | |
| N | I | 1.00 | 5.00 | 5.00 | 5.00 | 5.00 | 1.00 | | 7.00 | |

SHERBORNE CALCULATION DATE: 84/07/16
PH pH (-LOG(Hydrogen conc'n))

1982->83

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | | 6.28 | 6.06 | 5.77 | 6.03 | | | 6.03 | 6.01 |
| MIN | I | | 6.08 | 6.01 | 5.72 | 5.98 | | | 5.98 | 5.96 |
| MAX | I | | 6.36 | 6.09 | 5.81 | 6.09 | | | 6.09 | 6.09 |
| N | I | | 4.00 | 3.00 | 3.00 | 3.00 | | | 3.00 | 4.00 |

1983->84

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 5.96 | 6.28 | 5.93 | 5.71 | 6.05 | 6.10 | | 6.04 | |
| MIN | I | 5.96 | 6.06 | 5.78 | 5.66 | 5.84 | 6.10 | | 5.84 | |
| MAX | I | 5.96 | 6.43 | 6.03 | 5.78 | 6.16 | 6.10 | | 6.16 | |
| N | I | 1.00 | 5.00 | 5.00 | 5.00 | 5.00 | 1.00 | | 7.00 | |

SHERBORNE CALCULATION DATE: 84/07/16
PPUT Total Phosphorous ug/L

1982->83

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | | 4.09 | 4.04 | 4.97 | 4.27 | | | 4.27 | 4.53 |
| MIN | I | | 3.33 | 3.83 | 4.30 | 3.83 | | | 3.83 | 3.83 |
| MAX | I | | 4.87 | 4.20 | 5.43 | 4.89 | | | 4.89 | 5.30 |
| N | I | | 4.00 | 3.00 | 3.00 | 3.00 | | | 3.00 | 4.00 |

1983->84

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 5.30 | 3.55 | 5.20 | 5.60 | 4.52 | 4.51 | | 4.64 | |
| MIN | I | 5.30 | 2.63 | 3.97 | 4.47 | 3.58 | 4.51 | | 3.58 | |
| MAX | I | 5.30 | 4.23 | 6.70 | 7.00 | 5.05 | 4.51 | | 5.30 | |
| N | I | 1.00 | 5.00 | 4.00 | 5.00 | 4.00 | 1.00 | | 6.00 | |

SHERBORNE CALCULATION DATE: 84/07/16
SIO3UR Silicates mg/L

1982->83

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | | 1.02 | 1.06 | 1.20 | 1.11 | | | 1.11 | 1.17 |
| MIN | I | | 0.96 | 1.00 | 1.26 | 1.09 | | | 1.09 | 1.09 |
| MAX | I | | 1.08 | 1.12 | 1.30 | 1.14 | | | 1.14 | 1.33 |
| N | I | | 4.00 | 3.00 | 3.00 | 3.00 | | | 3.00 | 4.00 |

1983->84

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 1.33 | 0.958 | 1.12 | 1.48 | 1.10 | 0.941 | | 1.11 | |
| MIN | I | 1.33 | 0.65 | 0.99 | 1.35 | 0.908 | 0.941 | | 0.908 | |
| MAX | I | 1.33 | 1.22 | 1.27 | 1.58 | 1.28 | 0.941 | | 1.33 | |
| N | I | 1.00 | 5.00 | 5.00 | 5.00 | 5.00 | 1.00 | | 7.00 | |

SHERBORNE

CALCULATION DATE: 84/07/16

SSO4UR Sulphate as SO4 mg/L

1982->83

| | I I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | | 7.33 | 7.33 | 7.63 | 7.38 | | | 7.38 | 7.46 |
| MIN | I | | 7.20 | 7.20 | 7.50 | 7.30 | | | 7.30 | 7.38 |
| MAX | I | | 7.60 | 7.50 | 7.80 | 7.50 | | | 7.50 | 7.69 |
| N | I | | 4.00 | 3.00 | 3.00 | 3.00 | | | 3.00 | 4.00 |

1983->84

| | I I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 7.69 | 7.50 | 7.38 | 7.34 | 7.43 | 7.57 | | 7.48 | |
| MIN | I | 7.69 | 7.41 | 7.27 | 7.21 | 7.33 | 7.57 | | 7.33 | |
| MAX | I | 7.69 | 7.58 | 7.45 | 7.57 | 7.49 | 7.57 | | 7.69 | |
| N | I | 1.00 | 5.00 | 5.00 | 5.00 | 5.00 | 1.00 | | 7.00 | |

Table 25 con't

SMOKE

Calculation date: 84/07/16

1981->82

| | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|
| START | 810409 | 810621 | 810621 | 810621 | 810621 | 811021 | 811124 | 810409 | 810601 |
| END | 810620 | 811020 | 811020 | 811020 | 811020 | 811123 | 820426 | 811123 | 820531 |

1982->83

| | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|
| START | 820427 | 820521 | 820521 | 820521 | 820521 | 821101 | | 820427 | 820601 |
| END | 820520 | 821031 | 821031 | 821031 | 821031 | 821213 | | 821213 | 830531 |

1983->84

| | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|
| START | 830425 | 830521 | 830521 | 830521 | 830521 | 831101 | | 830425 | |
| END | 830520 | 831031 | 831031 | 831031 | 831031 | 831118 | | 831118 | |

SMOKE
ALKTI Alkalinity, TIA as CaCO3 mg/L

CALCULATION DATE: 84/07/16

1981->82

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 2.41 | 2.61 | 2.69 | 2.66 | 2.66 | 2.46 | 2.54 | 2.59 | 2.56 |
| MIN | I | 2.41 | 2.49 | 2.53 | 2.56 | 2.60 | 2.46 | 2.54 | 2.41 | 2.31 |
| MAX | I | 2.41 | 2.70 | 2.85 | 2.76 | 2.76 | 2.46 | 2.54 | 2.76 | 2.76 |
| N | I | 1.00 | 6.00 | 6.00 | 5.00 | 5.00 | 1.00 | 1.00 | 7.00 | 9.00 |

1982->83

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 2.31 | 2.55 | 2.52 | 2.44 | 2.49 | 2.66 | | 2.49 | 2.49 |
| MIN | I | 2.31 | 2.31 | 2.38 | 2.33 | 2.34 | 2.66 | | 2.31 | 2.34 |
| MAX | I | 2.31 | 2.79 | 2.64 | 2.56 | 2.64 | 2.66 | | 2.66 | 2.66 |
| N | I | 1.00 | 4.00 | 5.00 | 5.00 | 4.00 | 1.00 | | 6.00 | 6.00 |

1983->84

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 2.34 | 2.62 | 2.53 | 2.41 | 2.52 | | | 2.49 | |
| MIN | I | 2.34 | 2.28 | 2.34 | 2.28 | 2.27 | | | 2.27 | |
| MAX | I | 2.34 | 2.82 | 2.63 | 2.52 | 2.64 | | | 2.64 | |
| N | I | 1.00 | 5.00 | 5.00 | 5.00 | 5.00 | | | 6.00 | |

SMOKE
ALUT Aluminum ug/L

CALCULATION DATE: 84/07/16

1981->82

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | | | | | 24.0 | 100. | 16.0 | 62.0 | 42.0 |
| MIN | I | | | | | 24.0 | 100. | 16.0 | 24.0 | 16.0 |
| MAX | I | | | | | 24.0 | 100. | 16.0 | 100. | 100. |
| N | I | | | | | 1.00 | 1.00 | 1.00 | 2.00 | 4.00 |

1982->83

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 28.0 | 10.0 | 36.3 | 15.0 | 19.4 | 8.00 | | 18.9 | 18.6 |
| MIN | I | 28.0 | 7.00 | 18.0 | 2.00 | 7.69 | 8.00 | | 7.69 | 7.69 |
| MAX | I | 28.0 | 20.0 | 74.0 | 28.0 | 39.5 | 8.00 | | 39.5 | 39.5 |
| N | I | 1.00 | 4.00 | 4.00 | 4.00 | 4.00 | 1.00 | | 6.00 | 6.00 |

1983->84

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 26.0 | 12.0 | 15.4 | 34.0 | 21.2 | | | 22.0 | |
| MIN | I | 26.0 | 4.00 | 10.0 | 8.00 | 9.94 | | | 9.94 | |
| MAX | I | 26.0 | 24.0 | 26.0 | 96.0 | 50.4 | | | 50.4 | |
| N | I | 1.00 | 5.00 | 5.00 | 5.00 | 5.00 | | | 6.00 | |

SMOKE
CAUR Calcium mg/L

CALCULATION DATE: 84/07/16

1981->82

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 2.80 | 2.74 | 2.85 | 2.83 | 2.76 | | 2.80 | 2.77 | 2.76 |
| MIN | I | 2.80 | 2.60 | 2.70 | 2.60 | 2.68 | | 2.80 | 2.68 | 2.68 |
| MAX | I | 2.80 | 3.00 | 3.00 | 3.20 | 2.93 | | 2.80 | 2.93 | 2.93 |
| N | I | 1.00 | 5.00 | 6.00 | 6.00 | 5.00 | | 1.00 | 6.00 | 8.00 |

1982->83

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 2.70 | 2.62 | 2.88 | 2.85 | 2.81 | 2.70 | | 2.70 | 2.81 |
| MIN | I | 2.70 | 2.20 | 2.70 | 2.70 | 2.66 | 2.70 | | 2.66 | 2.66 |
| MAX | I | 2.70 | 2.80 | 3.00 | 2.90 | 2.89 | 2.70 | | 2.89 | 2.90 |
| N | I | 1.00 | 5.00 | 4.00 | 4.00 | 4.00 | 1.00 | | 6.00 | 6.00 |

1983->84

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 2.90 | 2.70 | 2.72 | 2.76 | 2.73 | | | 2.76 | |
| MIN | I | 2.90 | 2.50 | 2.60 | 2.70 | 2.61 | | | 2.61 | |
| MAX | I | 2.90 | 3.00 | 3.00 | 3.00 | 3.00 | | | 3.00 | |
| N | I | 1.00 | 5.00 | 5.00 | 5.00 | 5.00 | | | 6.00 | |

SMOKE
CLIDUR Chloride mg/L

CALCULATION DATE: 84/07/16

1981->82

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 1.23 | 1.18 | 1.19 | 1.19 | 1.18 | 1.10 | 1.05 | 1.17 | 1.14 |
| MIN | I | 1.23 | 1.15 | 1.15 | 1.15 | 1.15 | 1.10 | 1.05 | 1.10 | 1.05 |
| MAX | I | 1.23 | 1.20 | 1.25 | 1.25 | 1.20 | 1.10 | 1.05 | 1.23 | 1.23 |
| N | I | 1.00 | 4.00 | 6.00 | 5.00 | 3.00 | 1.00 | 1.00 | 5.00 | 7.00 |

1982->83

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 1.05 | 1.10 | 1.11 | 1.09 | 1.10 | 1.16 | | 1.10 | 1.12 |
| MIN | I | 1.05 | 1.05 | 1.00 | 1.00 | 1.02 | 1.16 | | 1.02 | 1.02 |
| MAX | I | 1.05 | 1.20 | 1.20 | 1.15 | 1.17 | 1.16 | | 1.17 | 1.18 |
| N | I | 1.00 | 5.00 | 4.00 | 4.00 | 4.00 | 1.00 | | 6.00 | 6.00 |

1983->84

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 1.10 | 1.10 | 1.14 | 1.17 | 1.14 | | | 1.15 | |
| MIN | I | 1.10 | 1.05 | 1.10 | 1.12 | 1.10 | | | 1.10 | |
| MAX | I | 1.10 | 1.15 | 1.17 | 1.25 | 1.19 | | | 1.19 | |
| N | I | 1.00 | 5.00 | 5.00 | 5.00 | 5.00 | | | 6.00 | |

SMOKE
COLTR Colour (true)

CALCULATION DATE: 84/07/16

1981->82

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 13.5 | 9.33 | 10.7 | 9.67 | 9.96 | 12.0 | 4.00 | 10.7 | 10.4 |
| MIN | I | 13.5 | 6.00 | 6.00 | 4.00 | 5.25 | 12.0 | 4.00 | 5.25 | 4.00 |
| MAX | I | 13.5 | 14.0 | 16.0 | 16.0 | 14.1 | 12.0 | 4.00 | 14.1 | 15.0 |
| N | I | 1.00 | 6.00 | 6.00 | 6.00 | 6.00 | 1.00 | 1.00 | 8.00 | 10.0 |

1982->83

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 15.0 | 13.2 | 15.4 | 14.4 | 14.3 | 11.0 | | 13.9 | 14.1 |
| MIN | I | 15.0 | 11.0 | 12.0 | 11.0 | 12.0 | 11.0 | | 11.0 | 11.0 |
| MAX | I | 15.0 | 16.0 | 18.0 | 18.0 | 17.1 | 11.0 | | 17.1 | 17.1 |
| N | I | 1.00 | 5.00 | 5.00 | 5.00 | 5.00 | 1.00 | | 7.00 | 7.00 |

1983->84

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 16.0 | 10.2 | 12.4 | 13.0 | 11.9 | | | 12.6 | |
| MIN | I | 16.0 | 7.00 | 10.0 | 10.0 | 9.36 | | | 9.36 | |
| MAX | I | 16.0 | 15.0 | 15.0 | 15.0 | 15.0 | | | 16.0 | |
| N | I | 1.00 | 5.00 | 5.00 | 5.00 | 5.00 | | | 6.00 | |

Table 26 con't

SMOKE
COND25 Conductivity (25 C)

CALCULATION DATE: 84/07/16

1981->82

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 33.0 | 32.2 | 35.3 | 35.0 | 34.2 | 34.0 | 34.0 | 34.1 | 34.0 |
| MIN | I | 33.0 | 27.0 | 34.0 | 35.0 | 32.2 | 34.0 | 34.0 | 32.2 | 32.2 |
| MAX | I | 33.0 | 34.0 | 36.0 | 39.0 | 34.9 | 34.0 | 34.0 | 34.9 | 34.9 |
| N | I | 1.00 | 6.00 | 6.00 | 6.00 | 6.00 | 1.00 | 1.00 | 8.00 | 10.0 |

1982->83

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 33.0 | 32.0 | 34.0 | 34.0 | 33.6 | 34.0 | | 33.6 | 33.6 |
| MIN | I | 33.0 | 32.0 | 33.0 | 33.0 | 32.0 | 34.0 | | 32.0 | 32.0 |
| MAX | I | 33.0 | 33.0 | 35.0 | 35.0 | 34.4 | 34.0 | | 34.4 | 34.4 |
| N | I | 1.00 | 5.00 | 5.00 | 5.00 | 5.00 | 1.00 | | 7.00 | 7.00 |

1983->84

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 33.0 | 33.0 | 31.6 | 34.3 | 33.2 | | | 33.2 | |
| MIN | I | 33.0 | 32.9 | 24.0 | 34.0 | 31.5 | | | 31.5 | |
| MAX | I | 33.0 | 33.0 | 34.0 | 35.0 | 34.1 | | | 34.1 | |
| N | I | 1.00 | 5.00 | 5.00 | 5.00 | 5.00 | | | 6.00 | |

SMOKE
DIC Dissolved Inorganic Carbon mg/L

CALCULATION DATE: 84/07/16

1981->82

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 0.759 | 0.80 | 1.33 | 1.48 | 1.20 | 1.80 | 0.80 | 1.22 | 1.26 |
| MIN | I | 0.759 | 0.60 | 1.10 | 0.70 | 0.739 | 1.80 | 0.80 | 0.739 | 0.739 |
| MAX | I | 0.759 | 1.10 | 1.80 | 2.80 | 1.81 | 1.80 | 0.80 | 1.81 | 2.00 |
| N | I | 1.00 | 5.00 | 6.00 | 6.00 | 5.00 | 1.00 | 1.00 | 7.00 | 9.00 |

1982->83

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 2.00 | 0.666 | 1.32 | 1.52 | 1.19 | 1.20 | | 1.31 | 1.16 |
| MIN | I | 2.00 | 0.59 | 0.93 | 1.12 | 0.961 | 1.20 | | 0.961 | 0.96 |
| MAX | I | 2.00 | 0.80 | 2.03 | 2.03 | 1.64 | 1.20 | | 2.00 | 1.64 |
| N | I | 1.00 | 5.00 | 5.00 | 5.00 | 5.00 | 1.00 | | 7.00 | 7.00 |

1983->84

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 0.96 | 0.652 | 1.01 | 1.46 | 1.08 | | | 1.05 | |
| MIN | I | 0.96 | 0.58 | 0.80 | 1.23 | 0.967 | | | 0.96 | |
| MAX | I | 0.96 | 0.71 | 1.26 | 1.66 | 1.18 | | | 1.18 | |
| N | I | 1.00 | 5.00 | 5.00 | 4.00 | 4.00 | | | 5.00 | |

SMOKE
DOC Dissolved Organic Carbon mg/L

CALCULATION DATE: 84/07/16

1981->82

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 3.32 | 3.12 | 2.83 | 2.42 | 2.77 | 3.20 | 3.00 | 2.91 | 3.12 |
| MIN | I | 3.32 | 2.90 | 2.50 | 1.30 | 2.44 | 3.20 | 3.00 | 2.44 | 2.44 |
| MAX | I | 3.32 | 3.40 | 3.20 | 2.80 | 3.10 | 3.20 | 3.00 | 3.32 | 4.70 |
| N | I | 1.00 | 5.00 | 6.00 | 6.00 | 5.00 | 1.00 | 1.00 | 7.00 | 9.00 |

1982->83

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 4.70 | 3.04 | 2.93 | 2.88 | 2.94 | 2.70 | | 3.20 | 2.88 |
| MIN | I | 4.70 | 2.80 | 2.70 | 2.70 | 2.73 | 2.70 | | 2.70 | 2.70 |
| MAX | I | 4.70 | 3.20 | 3.10 | 3.00 | 3.09 | 2.70 | | 4.70 | 3.09 |
| N | I | 1.00 | 5.00 | 4.00 | 4.00 | 4.00 | 1.00 | | 6.00 | 6.00 |

1983->84

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 2.80 | 3.24 | 2.94 | 2.84 | 2.99 | | | 2.96 | |
| MIN | I | 2.80 | 3.00 | 2.90 | 2.80 | 2.89 | | | 2.80 | |
| MAX | I | 2.80 | 3.60 | 3.00 | 2.90 | 3.15 | | | 3.15 | |
| N | I | 1.00 | 5.00 | 5.00 | 5.00 | 5.00 | | | 6.00 | |

SMOKE
FEUT Iron ug/L

CALCULATION DATE: 84/07/16

1981->82

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 35.9 | 32.0 | 36.7 | 80.0 | 53.6 | 50.0 | 30.0 | 50.6 | 50.4 |
| MIN | I | 35.9 | 20.0 | 20.0 | 40.0 | 27.5 | 50.0 | 30.0 | 27.5 | 27.5 |
| MAX | I | 35.9 | 40.0 | 60.0 | 250. | 119. | 50.0 | 30.0 | 119. | 119. |
| N | I | 1.00 | 5.00 | 6.00 | 6.00 | 5.00 | 1.00 | 1.00 | 7.00 | 9.00 |

1982->83

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 70.0 | 26.0 | 27.5 | 38.8 | 30.9 | 50.0 | | 40.6 | 39.0 |
| MIN | I | 70.0 | 20.0 | 20.0 | 35.0 | 26.6 | 50.0 | | 26.6 | 26.6 |
| MAX | I | 70.0 | 40.0 | 35.0 | 40.0 | 38.5 | 50.0 | | 70.0 | 60.0 |
| N | I | 1.00 | 5.00 | 4.00 | 4.00 | 4.00 | 1.00 | | 6.00 | 6.00 |

1983->84

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 60.0 | 22.0 | 20.0 | 38.0 | 26.8 | | | 32.3 | |
| MIN | I | 60.0 | 15.0 | 10.0 | 25.0 | 18.7 | | | 18.7 | |
| MAX | I | 60.0 | 30.0 | 30.0 | 55.0 | 35.1 | | | 60.0 | |
| N | I | 1.00 | 5.00 | 5.00 | 5.00 | 5.00 | | | 6.00 | |

SMOKE
FFIDUR Fluoride mg/L

CALCULATION DATE: 84/07/16

1983->84

| | I I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | | 38.0 | 36.3 | 36.1 | 36.8 | | | 36.8 | |
| MIN | I | | 37.0 | 36.0 | 35.2 | 36.1 | | | 36.1 | |
| MAX | I | | 39.6 | 36.6 | 36.7 | 37.2 | | | 37.2 | |
| N | I | | 4.00 | 4.00 | 4.00 | 4.00 | | | 4.00 | |

SMOKE
KKUR Potassium mg/L

CALCULATION DATE: 84/07/16

1981->82

| | I I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 0.409 | 0.386 | 0.397 | 0.405 | 0.398 | 0.35 | 0.35 | 0.392 | 0.389 |
| MIN | I | 0.409 | 0.34 | 0.35 | 0.35 | 0.35 | 0.35 | 0.35 | 0.35 | 0.35 |
| MAX | I | 0.409 | 0.44 | 0.46 | 0.46 | 0.452 | 0.35 | 0.35 | 0.452 | 0.452 |
| N | I | 1.00 | 5.00 | 6.00 | 6.00 | 5.00 | 1.00 | 1.00 | 7.00 | 9.00 |

1982->83

| | I I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 0.40 | 0.38 | 0.388 | 0.392 | 0.387 | 0.40 | | 0.39 | 0.396 |
| MIN | I | 0.40 | 0.34 | 0.36 | 0.36 | 0.354 | 0.40 | | 0.354 | 0.354 |
| MAX | I | 0.40 | 0.42 | 0.42 | 0.42 | 0.42 | 0.40 | | 0.42 | 0.44 |
| N | I | 1.00 | 5.00 | 5.00 | 5.00 | 5.00 | 1.00 | | 7.00 | 7.00 |

1983->84

| | I I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 0.44 | 0.416 | 0.416 | 0.412 | 0.415 | | | 0.419 | |
| MIN | I | 0.44 | 0.38 | 0.40 | 0.38 | 0.394 | | | 0.394 | |
| MAX | I | 0.44 | 0.44 | 0.44 | 0.44 | 0.432 | | | 0.44 | |
| N | I | 1.00 | 5.00 | 5.00 | 5.00 | 5.00 | | | 6.00 | |

SMOKE — CALCULATION DATE: 84/07/16

MGUR Magnesium mg/L

1981-)82

| | | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-) MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 0.839 | 0.77 | 0.824 | 0.84 | 0.803 | 0.95 | 0.85 | 0.833 | 0.836 |
| MIN | I | 0.839 | 0.70 | 0.80 | 0.76 | 0.738 | 0.95 | 0.85 | 0.738 | 0.738 |
| MAX | I | 0.839 | 0.90 | 0.90 | 0.92 | 0.909 | 0.95 | 0.85 | 0.95 | 0.95 |
| N | I | 1.00 | 5.00 | 5.00 | 6.00 | 4.00 | 1.00 | 1.00 | 6.00 | 8.00 |

1982-)83

| | | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-) MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 0.84 | 0.784 | 0.82 | 0.825 | 0.808 | 0.78 | | 0.809 | 0.799 |
| MIN | I | 0.84 | 0.74 | 0.78 | 0.80 | 0.774 | 0.78 | | 0.774 | 0.774 |
| MAX | I | 0.84 | 0.84 | 0.88 | 0.88 | 0.867 | 0.78 | | 0.867 | 0.867 |
| N | I | 1.00 | 5.00 | 4.00 | 4.00 | 4.00 | 1.00 | | 6.00 | 6.00 |

1983-)84

| | | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-) MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 0.78 | 0.792 | 0.804 | 0.812 | 0.804 | | | 0.80 | |
| MIN | I | 0.78 | 0.74 | 0.78 | 0.78 | 0.784 | | | 0.78 | |
| MAX | I | 0.78 | 0.84 | 0.82 | 0.82 | 0.825 | | | 0.825 | |
| N | I | 1.00 | 5.00 | 5.00 | 5.00 | 5.00 | | | 6.00 | |

SMOKE — CALCULATION DATE: 84/07/16

MNUT Manganese ug/L

1981-)82

| | | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-) MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 17.6 | 15.2 | 27.0 | 42.7 | 28.9 | 40.0 | 10.0 | 28.9 | 28.9 |
| MIN | I | 17.6 | 10.0 | 8.00 | 14.0 | 16.7 | 40.0 | 10.0 | 16.7 | 10.0 |
| MAX | I | 17.6 | 26.0 | 50.0 | 68.0 | 38.5 | 40.0 | 10.0 | 40.0 | 48.0 |
| N | I | 1.00 | 5.00 | 6.00 | 6.00 | 5.00 | 1.00 | 1.00 | 7.00 | 9.00 |

1982-)83

| | | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-) MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 48.0 | 12.2 | 25.0 | 30.0 | 22.0 | 43.0 | | 29.0 | 31.7 |
| MIN | I | 48.0 | 7.00 | 14.0 | 17.0 | 13.9 | 43.0 | | 13.9 | 13.9 |
| MAX | I | 48.0 | 24.0 | 51.0 | 47.0 | 36.7 | 43.0 | | 48.0 | 59.0 |
| N | I | 1.00 | 5.00 | 4.00 | 4.00 | 4.00 | 1.00 | | 6.00 | 6.00 |

1983-)84

| | | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-) MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 59.0 | 10.0 | 17.6 | 31.0 | 19.7 | | | 26.3 | |
| MIN | I | 59.0 | 7.00 | 4.00 | 13.0 | 9.12 | | | 9.12 | |
| MAX | I | 59.0 | 20.0 | 37.0 | 64.0 | 35.1 | | | 59.0 | |
| N | I | 1.00 | 5.00 | 5.00 | 5.00 | 5.00 | | | 6.00 | |

SMOKE
NAUR Sodium mg/L

CALCULATION DATE: 84/07/16

1981->82

| | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|
| MEAN | 1.26 | 1.26 | 1.24 | 1.25 | 1.25 | 1.10 | 1.20 | 1.23 | 1.22 |
| MIN | 1.26 | 1.10 | 1.10 | 1.10 | 1.12 | 1.10 | 1.20 | 1.10 | 1.10 |
| MAX | 1.26 | 1.40 | 1.30 | 1.40 | 1.34 | 1.10 | 1.20 | 1.34 | 1.34 |
| N | 1.00 | 5.00 | 6.00 | 6.00 | 5.00 | 1.00 | 1.00 | 7.00 | 9.00 |

1982->83

| | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|
| MEAN | 1.15 | 1.09 | 1.09 | 1.19 | 1.13 | 1.05 | | 1.12 | 1.15 |
| MIN | 1.15 | 0.95 | 1.00 | 1.00 | 0.92 | 1.05 | | 0.90 | 0.90 |
| MAX | 1.15 | 1.30 | 1.35 | 1.45 | 1.39 | 1.05 | | 1.39 | 1.39 |
| N | 1.00 | 5.00 | 5.00 | 5.00 | 5.00 | 1.00 | | 7.00 | 7.00 |

1983->84

| | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|
| MEAN | 1.30 | 1.10 | 1.15 | 1.15 | 1.13 | | | 1.16 | |
| MIN | 1.30 | 0.95 | 1.05 | 1.10 | 1.04 | | | 1.04 | |
| MAX | 1.30 | 1.20 | 1.20 | 1.20 | 1.10 | | | 1.30 | |
| N | 1.00 | 5.00 | 5.00 | 5.00 | 5.00 | | | 6.00 | |

SMOKE
NNHTFR Ammonium as N ug/L

CALCULATION DATE: 84/07/16
DETECTION LIMIT USED:1

1981->82

| | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|
| MEAN | 10.6 | 4.50 | 14.0 | 19.5 | 12.8 | 1.00 | 15.0 | 11.0 | 10.4 |
| MIN | 10.6 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 15.0 | 1.00 | 1.00 |
| MAX | 10.6 | 16.0 | 28.0 | 37.0 | 25.9 | 1.00 | 15.0 | 25.9 | 25.9 |
| N | 1.00 | 6.00 | 6.00 | 6.00 | 6.00 | 1.00 | 1.00 | 8.00 | 10.0 |

1982->83

| | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|
| MEAN | 1.00 | 2.00 | 5.40 | 5.40L | 4.65L | 2.00 | | 3.75L | 5.04L |
| MIN | 1.00 | 1.00 | 1.00 | 1.00 | 1.32 | 2.00 | | 1.00 | 1.32 |
| MAX | 1.00 | 4.00 | 9.00 | 9.00 | 7.10 | 2.00 | | 7.10 | 10.0 |
| N | 1.00 | 5.00 | 5.00 | 5.00 | 5.00 | 1.00 | | 7.00 | 7.00 |

1983->84

| | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|
| MEAN | 10.0 | 9.20 | 9.00 | 11.2L | 10.0L | | | 10.7L | |
| MIN | 10.0 | 1.00 | 2.00 | 1.00 | 5.33 | | | 5.33 | |
| MAX | 10.0 | 23.0 | 19.0 | 27.0 | 19.1 | | | 19.1 | |
| N | 1.00 | 5.00 | 5.00 | 5.00 | 5.00 | | | 6.00 | |

SMOKE
NNOTFR Nitrate and Nitrite as N ug/L

CALCULATION DATE: 84/07/16
DETECTION LIMIT USED:2

1981->82

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 130. | 10.0 | 131. | 185. | 95.4 | 115. | 135. | 102. | 116. |
| MIN | I | 130. | 5.00 | 70.0 | 160. | 89.1 | 115. | 135. | 89.1 | 89.1 |
| MAX | I | 130. | 25.0 | 215. | 215. | 105. | 115. | 135. | 130. | 205. |
| N | I | 1.00 | 6.00 | 6.00 | 6.00 | 6.00 | 1.00 | 1.00 | 8.00 | 10.0 |

1982->83

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 205. | 52.4L | 157. | 199. | 139.L | 110. | | 144.L | 137.L |
| MIN | I | 205. | 2.00 | 135. | 185. | 114. | 110. | | 110. | 110. |
| MAX | I | 205. | 140. | 207. | 220. | 167. | 110. | | 205. | 167. |
| N | I | 1.00 | 5.00 | 5.00 | 5.00 | 5.00 | 1.00 | | 7.00 | 7.00 |

1983->84

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 154. | 73.4L | 101. | 166. | 120.L | | | 126.L | |
| MIN | I | 154. | 2.00 | 70.0 | 148. | 86.4 | | | 86.4 | |
| MAX | I | 154. | 198. | 120. | 198. | 180. | | | 180. | |
| N | I | 1.00 | 5.00 | 5.00 | 5.00 | 5.00 | | | 6.00 | |

SMOKE
NNTKUR Total Kjeldahl Nitrogen ug/L

CALCULATION DATE: 84/07/16

1981->82

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT. | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 210. | 207. | 213. | 213. | 210. | 180. | 190. | 200. | 202. |
| MIN | I | 210. | 185. | 180. | 190. | 190. | 180. | 190. | 180. | 170. |
| MAX | I | 210. | 235. | 235. | 230. | 221. | 180. | 190. | 221. | 221. |
| N | I | 1.00 | 6.00 | 6.00 | 6.00 | 6.00 | 1.00 | 1.00 | 8.00 | 10.0 |

1982->83

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 170. | 215. | 200. | 189. | 203. | 195. | | 197. | 201. |
| MIN | I | 170. | 185. | 160. | 175. | 173. | 195. | | 170. | 173. |
| MAX | I | 170. | 280. | 270. | 205. | 250. | 195. | | 250. | 250. |
| N | I | 1.00 | 5.00 | 5.00 | 5.00 | 5.00 | 1.00 | | 7.00 | 7.00 |

1983->84

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 195. | 173. | 180. | 175. | 176. | | | 180. | |
| MIN | I | 195. | 160. | 155. | 150. | 155. | | | 155. | |
| MAX | I | 195. | 180. | 190. | 190. | 187. | | | 195. | |
| N | I | 1.00 | 5.00 | 5.00 | 4.00 | 4.00 | | | 5.00 | |

SMOKE
PH pH [-LOG(Hydrogen conc'n)]

CALCULATION DATE: 84/07/16

1981->82

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 6.47 | 6.67 | 6.33 | 6.18 | 6.43 | 6.21 | 6.39 | 6.40 | 6.39 |
| MIN | I | 6.47 | 6.36 | 5.92 | 6.05 | 6.22 | 6.21 | 6.39 | 6.21 | 6.21 |
| MAX | I | 6.47 | 6.88 | 6.77 | 6.29 | 6.56 | 6.21 | 6.39 | 6.56 | 6.56 |
| N | I | 1.00 | 6.00 | 6.00 | 5.00 | 5.00 | 1.00 | 1.00 | 7.00 | 9.00 |

1982->83

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 6.25 | 6.77 | 6.25 | 6.11 | 6.36 | 6.13 | | 6.31 | 6.31 |
| MIN | I | 6.25 | 6.70 | 5.97 | 5.97 | 6.20 | 6.13 | | 6.13 | 6.13 |
| MAX | I | 6.25 | 6.92 | 6.41 | 6.24 | 6.45 | 6.13 | | 6.45 | 6.45 |
| N | I | 1.00 | 5.00 | 5.00 | 5.00 | 5.00 | 1.00 | | 7.00 | 7.00 |

1983->84

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 6.26 | 6.70 | 6.33 | 6.18 | 6.36 | | | 6.34 | |
| MIN | I | 6.26 | 6.59 | 6.19 | 5.97 | 6.33 | | | 6.26 | |
| MAX | I | 6.26 | 6.81 | 6.44 | 6.20 | 6.40 | | | 6.40 | |
| N | I | 1.00 | 5.00 | 5.00 | 5.00 | 5.00 | | | 6.00 | |

SMOKE
PPUT Total Phosphorous ug/L

CALCULATION DATE: 84/07/16

1981->82

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT. | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 5.48 | 5.49 | 6.36 | 5.30 | 5.66 | 5.07 | 4.50 | 5.56 | 5.42 |
| MIN | I | 5.48 | 4.70 | 3.93 | 4.13 | 4.58 | 5.07 | 4.50 | 4.58 | 4.50 |
| MAX | I | 5.48 | 6.17 | 8.60 | 6.27 | 6.70 | 5.07 | 4.50 | 6.70 | 6.70 |
| N | I | 1.00 | 6.00 | 6.00 | 6.00 | 6.00 | 1.00 | 1.00 | 8.00 | 10.0 |

1982->83

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 5.20 | 5.60 | 6.66 | 5.95 | 6.02 | 5.70 | | 5.85 | 6.04 |
| MIN | I | 5.20 | 4.30 | 5.67 | 5.17 | 5.24 | 5.70 | | 5.20 | 5.24 |
| MAX | I | 5.20 | 6.73 | 7.63 | 6.53 | 6.91 | 5.70 | | 6.91 | 6.91 |
| N | I | 1.00 | 5.00 | 5.00 | 5.00 | 5.00 | 1.00 | | 7.00 | 7.00 |

1983->84

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 6.47 | 4.50 | 5.81 | 5.45 | 5.39 | | | 5.61 | |
| MIN | I | 6.47 | 4.00 | 5.53 | 5.00 | 5.07 | | | 5.07 | |
| MAX | I | 6.47 | 5.10 | 6.13 | 6.20 | 5.60 | | | 6.47 | |
| N | I | 1.00 | 4.00 | 5.00 | 5.00 | 4.00 | | | 5.00 | |

SMOKE
SIO3UR Silicates mg/L

CALCULATION DATE: 84/07/16

1981->82

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 1.12 | 0.77 | 1.13 | 1.43 | 1.18 | 1.20 | 1.00 | 1.12 | 1.12 |
| MIN | I | 1.12 | 0.60 | 0.60 | 1.18 | 1.03 | 1.20 | 1.00 | 1.03 | 1.00 |
| MAX | I | 1.12 | 1.05 | 1.55 | 1.55 | 1.24 | 1.20 | 1.00 | 1.24 | 1.24 |
| N | I | 1.00 | 5.00 | 6.00 | 6.00 | 5.00 | 1.00 | 1.00 | 7.00 | 9.00 |

1982->83

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 1.20 | 0.638 | 1.00 | 1.33 | 0.967 | 0.79 | | 0.977 | 0.985 |
| MIN | I | 1.20 | 0.23 | 0.96 | 1.22 | 0.903 | 0.79 | | 0.79 | 0.79 |
| MAX | I | 1.20 | 1.24 | 1.26 | 1.44 | 1.06 | 0.79 | | 1.20 | 1.25 |
| N | I | 1.00 | 5.00 | 4.00 | 4.00 | 4.00 | 1.00 | | 6.00 | 6.00 |

1983->84

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 1.25 | 0.838 | 0.998 | 1.38 | 1.08 | | | 1.11 | |
| MIN | I | 1.25 | 0.47 | 0.88 | 1.19 | 0.988 | | | 0.908 | |
| MAX | I | 1.25 | 1.13 | 1.13 | 1.47 | 1.19 | | | 1.25 | |
| N | I | 1.00 | 5.00 | 5.00 | 5.00 | 5.00 | | | 6.00 | |

SMOKE
SSO4UR Sulphate as SO4 mg/L

CALCULATION DATE: 84/07/16

1981->82

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 8.42 | 8.30 | 8.32 | 8.47 | 8.34 | 8.00 | 8.50 | 8.30 | 8.32 |
| MIN | I | 8.42 | 8.00 | 7.90 | 8.00 | 7.98 | 8.00 | 8.50 | 7.98 | 7.98 |
| MAX | I | 8.42 | 8.60 | 8.60 | 9.00 | 8.56 | 8.00 | 8.50 | 8.56 | 8.56 |
| N | I | 1.00 | 5.00 | 6.00 | 6.00 | 5.00 | 1.00 | 1.00 | 7.00 | 9.00 |

1982->83

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 8.30 | 7.60 | 7.70 | 7.78 | 7.70 | 7.76 | | 7.80 | 7.69 |
| MIN | I | 8.30 | 7.20 | 7.50 | 7.50 | 7.48 | 7.76 | | 7.48 | 7.48 |
| MAX | I | 8.30 | 7.90 | 8.00 | 8.10 | 8.03 | 7.76 | | 8.30 | 8.03 |
| N | I | 1.00 | 5.00 | 5.00 | 5.00 | 5.00 | 1.00 | | 7.00 | 7.00 |

1983->84

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 7.56 | 7.85 | 7.71 | 7.69 | 7.74 | | | 7.71 | |
| MIN | I | 7.56 | 7.65 | 7.58 | 7.59 | 7.62 | | | 7.56 | |
| MAX | I | 7.56 | 8.01 | 7.83 | 7.80 | 7.85 | | | 7.85 | |
| N | I | 1.00 | 5.00 | 5.00 | 5.00 | 5.00 | | | 6.00 | |

TIMBERWOLF

Calculation date: 84/07/16

1982->83

| | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|
| START | 820427 | 820521 | 820521 | 820521 | 820521 | 821101 | | 820427 | 820601 |
| END | 820520 | 821031 | 821031 | 821031 | 821031 | 821213 | | 821213 | 830531 |

1983->84

| | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|
| START | 830425 | 830521 | 830521 | 830521 | 830521 | 831101 | | 830425 | |
| END | 830520 | 831031 | 831031 | 831031 | 831031 | 831110 | | 831110 | |

TIMBERWOLF CALCULATION DATE: 84/07/16
ALKTI Alkalinity, TIA as CaCO3 mg/L

1982->83

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 1.17 | 1.40 | 1.64 | 1.86 | 1.54 | 1.69 | | 1.51 | 1.51 |
| MIN | I | 1.17 | 1.10 | 1.17 | 1.21 | 1.14 | 1.69 | | 1.14 | 1.14 |
| MAX | I | 1.17 | 1.70 | 2.33 | 2.86 | 1.87 | 1.69 | | 1.87 | 1.87 |
| N | I | 1.00 | 5.00 | 5.00 | 5.00 | 5.00 | 1.00 | | 7.00 | 7.00 |

1983->84

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 1.21 | 1.47 | 1.52 | 1.95 | 1.51 | | | 1.46 | |
| MIN | I | 1.21 | 1.27 | 1.01 | 1.15 | 1.09 | | | 1.09 | |
| MAX | I | 1.21 | 1.58 | 2.01 | 3.01 | 1.83 | | | 1.83 | |
| N | I | 1.00 | 5.00 | 5.00 | 5.00 | 5.00 | | | 6.00 | |

TIMBERWOLF CALCULATION DATE: 84/07/16
ALUT Aluminum ug/L

1982->83

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 82.0 | 25.6 | 55.4 | 75.0 | 38.2 | 35.0 | | 44.0 | 41.7 |
| MIN | I | 82.0 | 13.0 | 34.0 | 47.0 | 23.7 | 35.0 | | 23.7 | 23.7 |
| MAX | I | 82.0 | 38.0 | 76.0 | 100. | 54.9 | 35.0 | | 82.0 | 65.0 |
| N | I | 1.00 | 5.00 | 5.00 | 5.00 | 5.00 | 1.00 | | 7.00 | 7.00 |

1983->84

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 65.0 | 21.4 | 43.6 | 83.0 | 35.4 | | | 40.5 | |
| MIN | I | 65.0 | 8.00 | 33.0 | 47.0 | 20.2 | | | 20.2 | |
| MAX | I | 65.0 | 44.0 | 58.0 | 110. | 51.0 | | | 65.0 | |
| N | I | 1.00 | 5.00 | 5.00 | 5.00 | 5.00 | | | 6.00 | |

TIMBERWOLF — CALCULATION DATE: 84/07/16
CAUR Calcium mg/L

1982->83

| | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|
| MEAN | 2.41 | 2.34 | 2.46 | 2.50 | 2.38 | 2.20 | | 2.36 | 2.40 |
| MIN | 2.41 | 2.20 | 2.30 | 2.30 | 2.25 | 2.20 | | 2.20 | 2.20 |
| MAX | 2.41 | 2.40 | 2.70 | 2.80 | 2.49 | 2.20 | | 2.49 | 2.66 |
| N | 1.00 | 5.00 | 5.00 | 5.00 | 5.00 | 1.00 | | 7.00 | 7.00 |

1983->84

| | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|
| MEAN | 2.66 | 2.38 | 2.40 | 2.40 | 2.39 | | | 2.44 | |
| MIN | 2.66 | 2.20 | 2.30 | 2.30 | 2.25 | | | 2.25 | |
| MAX | 2.66 | 2.70 | 2.50 | 2.50 | 2.62 | | | 2.66 | |
| N | 1.00 | 5.00 | 5.00 | 5.00 | 5.00 | | | 6.00 | |

TIMBERWOLF — CALCULATION DATE: 84/07/16
CLIDUR Chloride mg/L

1982->83

| | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|
| MEAN | 0.25 | 0.26 | 0.256 | 0.276 | 0.254 | 0.35 | | 0.267 | 0.267 |
| MIN | 0.25 | 0.20 | 0.20 | 0.23 | 0.207 | 0.35 | | 0.207 | 0.207 |
| MAX | 0.25 | 0.30 | 0.30 | 0.35 | 0.30 | 0.35 | | 0.35 | 0.35 |
| N | 1.00 | 5.00 | 5.00 | 5.00 | 5.00 | 1.00 | | 7.00 | 7.00 |

1983->84

| | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|
| MEAN | 0.245 | 0.224 | 0.230 | 0.230 | 0.23 | | | 0.232 | |
| MIN | 0.245 | 0.18 | 0.20 | 0.20 | 0.194 | | | 0.194 | |
| MAX | 0.245 | 0.26 | 0.20 | 0.29 | 0.272 | | | 0.272 | |
| N | 1.00 | 5.00 | 5.00 | 5.00 | 5.00 | | | 6.00 | |

TIMBERWOLF — CALCULATION DATE: 84/07/16
COLTR Colour (true)

1982->83

| | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|
| MEAN | 30.0 | 19.6 | 35.4 | 53.2 | 26.1 | 30.0 | | 29.5 | 27.6 |
| MIN | 30.0 | 14.0 | 27.0 | 33.0 | 22.2 | 30.0 | | 22.2 | 22.2 |
| MAX | 30.0 | 25.0 | 48.0 | 86.0 | 29.4 | 30.0 | | 30.0 | 30.0 |
| N | 1.00 | 5.00 | 5.00 | 5.00 | 5.00 | 1.00 | | 7.00 | 7.00 |

1983->84

| | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|
| MEAN | 25.1 | 17.4 | 25.2 | 51.6 | 23.0 | | | 23.3 | |
| MIN | 25.1 | 13.0 | 22.0 | 24.0 | 19.7 | | | 19.7 | |
| MAX | 25.1 | 24.0 | 29.0 | 102. | 25.5 | | | 25.5 | |
| N | 1.00 | 5.00 | 5.00 | 5.00 | 5.00 | | | 6.00 | |

TIMBERWOLF CALCULATION DATE: 84/07/16
COND25 Conductivity (25 C)

1982->83

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 27.1 | 26.0 | 29.0 | 28.0 | 27.5 | 27.0 | | 27.4 | 27.4 |
| MIN | I | 27.1 | 26.0 | 28.0 | 27.0 | 27.2 | 27.0 | | 27.0 | 27.0 |
| MAX | I | 27.1 | 27.0 | 30.0 | 30.0 | 28.1 | 27.0 | | 28.1 | 28.1 |
| N | I | 1.00 | 5.00 | 5.00 | 5.00 | 5.00 | 1.00 | | 7.00 | 7.00 |

1983->84

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 27.0 | 27.0 | 28.3 | 29.1 | 27.7 | | | 27.6 | |
| MIN | I | 27.0 | 26.0 | 27.0 | 28.0 | 26.8 | | | 26.8 | |
| MAX | I | 27.0 | 27.0 | 29.4 | 30.0 | 28.4 | | | 28.4 | |
| N | I | 1.00 | 5.00 | 5.00 | 5.00 | 5.00 | | | 6.00 | |

TIMBERWOLF CALCULATION DATE: 84/07/16
DIC Dissolved Inorganic Carbon mg/L

1982->83

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 0.676 | 0.442 | 2.16 | 2.30 | 0.985 | 0.68 | | 0.897 | 0.903 |
| MIN | I | 0.676 | 0.36 | 1.15 | 0.83 | 0.749 | 0.68 | | 0.676 | 0.68 |
| MAX | I | 0.676 | 0.54 | 4.02 | 4.65 | 1.20 | 0.68 | | 1.20 | 1.20 |
| N | I | 1.00 | 5.00 | 5.00 | 5.00 | 5.00 | 1.00 | | 7.00 | 7.00 |

1983->84

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 0.717 | 0.40 | 1.23 | 2.00 | 0.85 | | | 0.828 | |
| MIN | I | 0.717 | 0.34 | 0.64 | 1.13 | 0.618 | | | 0.618 | |
| MAX | I | 0.717 | 0.50 | 1.72 | 3.17 | 1.08 | | | 1.08 | |
| N | I | 1.00 | 5.00 | 5.00 | 5.00 | 5.00 | | | 6.00 | |

TIMBERWOLF CALCULATION DATE: 84/07/16
DOC Dissolved Organic Carbon mg/L

1982->83

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 4.27 | 3.86 | 4.00 | 4.20 | 3.92 | 3.90 | | 3.96 | 3.88 |
| MIN | I | 4.27 | 3.70 | 3.80 | 3.90 | 3.76 | 3.90 | | 3.76 | 3.72 |
| MAX | I | 4.27 | 4.10 | 4.20 | 4.50 | 4.06 | 3.90 | | 4.27 | 4.06 |
| N | I | 1.00 | 5.00 | 5.00 | 5.00 | 5.00 | 1.00 | | 7.00 | 7.00 |

1983->84

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 3.72 | 3.48 | 3.66 | 3.84 | 3.58 | | | 3.60 | |
| MIN | I | 3.72 | 1.40 | 3.40 | 3.60 | 2.70 | | | 2.70 | |
| MAX | I | 3.72 | 4.50 | 3.80 | 4.10 | 3.97 | | | 3.97 | |
| N | I | 1.00 | 5.00 | 5.00 | 5.00 | 5.00 | | | 6.00 | |

TIMBERWOLF CALCULATION DATE: 84/07/16
FEUT Iron ug/L

1982->83

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 262. | 66.0 | 355. | 865. | 214. | 350. | | 240. | 224. |
| MIN | I | 262. | 35.0 | 185. | 310. | 149. | 350. | | 149. | 149. |
| MAX | I | 262. | 90.0 | 640. | 1760. | 365. | 350. | | 365. | 365. |
| N | I | 1.00 | 5.00 | 5.00 | 5.00 | 5.00 | 1.00 | | 7.00 | 7.00 |

1983->84

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 150. | 43.0 | 148. | 797. | 145. | | | 146. | |
| MIN | I | 150. | 15.0 | 70.0 | 160. | 64.0 | | | 64.0 | |
| MAX | I | 150. | 65.0 | 310. | 2000. | 306. | | | 306. | |
| N | I | 1.00 | 5.00 | 5.00 | 5.00 | 5.00 | | | 6.00 | |

TIMBERWOLF CALCULATION DATE: 84/07/16
FFIDUR Fluoride ug/L

1983->84

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | | 43.6 | 40.7 | 41.8 | 42.2 | | | 42.2 | |
| MIN | I | | 39.2 | 36.1 | 35.2 | 36.8 | | | 36.8 | |
| MAX | I | | 46.5 | 45.0 | 47.5 | 46.2 | | | 46.2 | |
| N | I | | 4.00 | 4.00 | 4.00 | 4.00 | | | 4.00 | |

TIMBERWOLF CALCULATION DATE: 84/07/16
KKUR Potassium mg/L

1982->83

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 0.44 | 0.416 | 0.432 | 0.428 | 0.42 | 0.46 | | 0.429 | 0.437 |
| MIN | I | 0.44 | 0.40 | 0.40 | 0.40 | 0.40 | 0.46 | | 0.40 | 0.40 |
| MAX | I | 0.44 | 0.44 | 0.46 | 0.46 | 0.445 | 0.46 | | 0.46 | 0.50 |
| N | I | 1.00 | 5.00 | 5.00 | 5.00 | 5.00 | 1.00 | | 7.00 | 7.00 |

1983->84

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 0.50 | 0.46 | 0.46 | 0.472 | 0.461 | | | 0.468 | |
| MIN | I | 0.50 | 0.44 | 0.44 | 0.46 | 0.442 | | | 0.442 | |
| MAX | I | 0.50 | 0.48 | 0.48 | 0.48 | 0.475 | | | 0.50 | |
| N | I | 1.00 | 5.00 | 5.00 | 5.00 | 5.00 | | | 6.00 | |

TIMBERWOLF
MGUR Magnesium mg/L

CALCULATION DATE: 84/07/16

1982->83

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 0.648 | 0.612 | 0.628 | 0.628 | 0.617 | 0.58 | | 0.616 | 0.609 |
| MIN | I | 0.648 | 0.60 | 0.60 | 0.56 | 0.594 | 0.58 | | 0.58 | 0.58 |
| MAX | I | 0.648 | 0.62 | 0.64 | 0.66 | 0.628 | 0.58 | | 0.648 | 0.628 |
| N | I | 1.00 | 5.00 | 5.00 | 5.00 | 5.00 | 1.00 | | 7.00 | 7.00 |

1983->84

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 0.596 | 0.624 | 0.632 | 0.616 | 0.627 | | | 0.622 | |
| MIN | I | 0.596 | 0.60 | 0.60 | 0.60 | 0.609 | | | 0.596 | |
| MAX | I | 0.596 | 0.66 | 0.68 | 0.62 | 0.666 | | | 0.666 | |
| N | I | 1.00 | 5.00 | 5.00 | 5.00 | 5.00 | | | 6.00 | |

TIMBERWOLF
MNUT Manganese ug/L

CALCULATION DATE: 84/07/16

1982->83

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 61.6 | 25.4 | 108. | 120. | 52.6 | 48.0 | | 53.2 | 48.6 |
| MIN | I | 61.6 | 9.00 | 56.0 | 54.0 | 39.2 | 48.0 | | 39.2 | 29.0 |
| MAX | I | 61.6 | 48.0 | 162. | 206. | 64.8 | 48.0 | | 64.8 | 64.8 |
| N | I | 1.00 | 5.00 | 5.00 | 5.00 | 5.00 | 1.00 | | 7.00 | 7.00 |

1983->84

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 29.0 | 14.0 | 64.8 | 166. | 44.1 | | | 41.6 | |
| MIN | I | 29.0 | 5.00 | 27.0 | 48.0 | 20.9 | | | 20.9 | |
| MAX | I | 29.0 | 23.0 | 121. | 355. | 78.8 | | | 78.8 | |
| N | I | 1.00 | 5.00 | 5.00 | 5.00 | 5.00 | | | 6.00 | |

TIMBERWOLF
NAUR Sodium mg/L

CALCULATION DATE: 84/07/16

1982->83

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 0.762 | 0.64 | 0.62 | 0.63 | 0.63 | 0.60 | | 0.644 | 0.628 |
| MIN | I | 0.762 | 0.60 | 0.60 | 0.55 | 0.596 | 0.60 | | 0.596 | 0.596 |
| MAX | I | 0.762 | 0.75 | 0.65 | 0.70 | 0.703 | 0.60 | | 0.762 | 0.703 |
| N | I | 1.00 | 5.00 | 5.00 | 5.00 | 5.00 | 1.00 | | 7.00 | 7.00 |

1983->84

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 0.65 | 0.60 | 0.56 | 0.62 | 0.587 | | | 0.597 | |
| MIN | I | 0.65 | 0.55 | 0.50 | 0.60 | 0.554 | | | 0.554 | |
| MAX | I | 0.65 | 0.65 | 0.60 | 0.65 | 0.631 | | | 0.65 | |
| N | I | 1.00 | 5.00 | 5.00 | 5.00 | 5.00 | | | 6.00 | |

TIMBERWOLF
NNHTFR Ammonium as N ug/L

CALCULATION DATE: 84/07/16
DETECTION LIMIT USED:1

1982->83

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 6.81 | 4.00 | 16.6 | 15.0 | 8.32 | 11.0 | | 8.49 | 8.93 |
| MIN | I | 6.81 | 1.00 | 8.00 | 7.00 | 4.97 | 11.0 | | 4.97 | 4.97 |
| MAX | I | 6.81 | 9.00 | 23.0 | 21.0 | 14.4 | 11.0 | | 14.4 | 14.4 |
| N | I | 1.00 | 5.00 | 5.00 | 5.00 | 5.00 | 1.00 | | 7.00 | 7.00 |

1983->84

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 9.89 | 2.20 | 10.6L | 33.2 | 8.77L | | | 8.96L | |
| MIN | I | 9.89 | 1.00 | 1.00 | 5.00 | 1.35 | | | 1.35 | |
| MAX | I | 9.89 | 5.00 | 20.0 | 71.0 | 14.2 | | | 14.2 | |
| N | I | 1.00 | 5.00 | 5.00 | 5.00 | 5.00 | | | 6.00 | |

TIMBERWOLF
NNOTFR Nitrate and Nitrite as N ug/L

CALCULATION DATE: 84/07/16
DETECTION LIMIT USED:2

1982->83

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 214. | 49.8 | 187. | 237. | 97.9 | 48.0 | | 189. | 94.2 |
| MIN | I | 214. | 2.00 | 138. | 205. | 38.8 | 48.0 | | 38.8 | 38.8 |
| MAX | I | 214. | 140. | 247. | 277. | 172. | 48.0 | | 214. | 172. |
| N | I | 1.00 | 4.00 | 5.00 | 5.00 | 4.00 | 1.00 | | 6.00 | 6.00 |

1983->84

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 125. | 12.4L | 67.0 | 159. | 47.3L | | | 60.3L | |
| MIN | I | 125. | 2.00 | 50.0 | 123. | 35.2 | | | 35.2 | |
| MAX | I | 125. | 54.0 | 82.0 | 220. | 78.6 | | | 125. | |
| N | I | 1.00 | 5.00 | 5.00 | 5.00 | 5.00 | | | 6.00 | |

TIMBERWOLF
NNTKUR Total Kjeldahl Nitrogen ug/L

CALCULATION DATE: 84/07/16

1982->83

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 220. | 224. | 261. | 275. | 237. | 245. | | 236. | 236. |
| MIN | I | 220. | 200. | 235. | 240. | 210. | 245. | | 210. | 210. |
| MAX | I | 220. | 245. | 305. | 315. | 265. | 245. | | 265. | 265. |
| N | I | 1.00 | 5.00 | 5.00 | 5.00 | 5.00 | 1.00 | | 7.00 | 7.00 |

1983->84

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 221. | 195. | 211. | 245. | 205. | | | 208. | |
| MIN | I | 221. | 180. | 195. | 210. | 192. | | | 192. | |
| MAX | I | 221. | 220. | 225. | 280. | 219. | | | 221. | |
| N | I | 1.00 | 5.00 | 5.00 | 5.00 | 5.00 | | | 6.00 | |

TIMBERWOLF — CALCULATION DATE: 84/07/16

PH pH [-LOG(Hydrogen conc'n)]

1982->83

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 5.89 | 6.41 | 5.74 | 5.73 | 6.16 | 6.07 | | 6.11 | 6.12 |
| MIN | I | 5.89 | 6.23 | 5.52 | 5.68 | 5.98 | 6.07 | | 5.89 | 5.98 |
| MAX | I | 5.89 | 6.55 | 5.91 | 5.78 | 6.35 | 6.07 | | 6.35 | 6.35 |
| N | I | 1.00 | 5.00 | 5.00 | 5.00 | 5.00 | 1.00 | | 7.00 | 7.00 |

1983->84

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 5.98 | 6.37 | 5.86 | 5.75 | 6.10 | | | 6.08 | |
| MIN | I | 5.98 | 6.27 | 5.75 | 5.69 | 5.99 | | | 5.98 | |
| MAX | I | 5.98 | 6.43 | 5.94 | 5.80 | 6.15 | | | 6.15 | |
| N | I | 1.00 | 5.00 | 5.00 | 5.00 | 5.00 | | | 6.00 | |

TIMBERWOLF — CALCULATION DATE: 84/07/16

PPUT Total Phosphorous ug/L

1982->83

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 6.75 | 6.83 | 9.40 | 10.1 | 7.82 | 9.07 | | 7.85 | 8.06 |
| MIN | I | 6.75 | 4.60 | 6.07 | 7.57 | 5.95 | 9.07 | | 5.95 | 5.95 |
| MAX | I | 6.75 | 9.55 | 11.3 | 13.7 | 10.0 | 9.07 | | 10.0 | 10.0 |
| N | I | 1.00 | 5.00 | 5.00 | 5.00 | 5.00 | 1.00 | | 7.00 | 7.00 |

1983->84

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 8.20 | 4.81 | 6.81 | 10.1 | 6.17 | | | 6.51 | |
| MIN | I | 8.20 | 4.10 | 5.47 | 7.27 | 5.14 | | | 5.14 | |
| MAX | I | 8.20 | 5.50 | 7.97 | 14.0 | 7.40 | | | 8.20 | |
| N | I | 1.00 | 5.00 | 5.00 | 5.00 | 5.00 | | | 6.00 | |

TIMBERWOLF — CALCULATION DATE: 84/07/16

SIO3UR Silicates mg/L

1982->83

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 1.59 | 1.06 | 1.66 | 1.93 | 1.28 | 1.05 | | 1.29 | 1.28 |
| MIN | I | 1.59 | 0.75 | 1.41 | 1.86 | 0.949 | 1.05 | | 0.949 | 0.949 |
| MAX | I | 1.59 | 1.54 | 1.80 | 2.03 | 1.67 | 1.05 | | 1.67 | 1.67 |
| N | I | 1.00 | 5.00 | 5.00 | 5.00 | 5.00 | 1.00 | | 7.00 | 7.00 |

1983->84

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 1.48 | 0.72 | 1.18 | 1.83 | 0.988 | | | 1.07 | |
| MIN | I | 1.48 | 0.46 | 1.00 | 1.58 | 0.758 | | | 0.758 | |
| MAX | I | 1.48 | 1.12 | 1.26 | 2.06 | 1.23 | | | 1.48 | |
| N | I | 1.00 | 5.00 | 5.00 | 5.00 | 5.00 | | | 6.00 | |

Table 27 con't

TIMBERWOLF CALCULATION DATE: 84/07/16
BSO4UR Sulphate as SO4 mg/L

1982->83

| | I I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 7.49 | 7.06 | 7.14 | 7.06 | 7.09 | 7.01 | | 7.13 | 7.21 |
| MIN | I | 7.49 | 6.70 | 6.80 | 6.70 | 6.93 | 7.01 | | 6.93 | 6.93 |
| MAX | I | 7.49 | 7.30 | 7.30 | 7.30 | 7.26 | 7.01 | | 7.49 | 8.02 |
| N | I | 1.00 | 5.00 | 5.00 | 5.00 | 5.00 | 1.00 | | 7.00 | 7.00 |

1983->84

| | I I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 8.02 | 7.31 | 7.31 | 7.12 | 7.29 | | | 7.41 | |
| MIN | I | 8.02 | 7.08 | 6.98 | 6.31 | 6.98 | | | 6.98 | |
| MAX | I | 8.02 | 7.66 | 7.59 | 7.60 | 7.62 | | | 8.02 | |
| N | I | 1.00 | 5.00 | 5.00 | 5.00 | 5.00 | | | 6.00 | |

WESTWARD

Calculation date: 84/07/16

1981->82

| | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|
| START | 810409 | 810621 | 810621 | 810621 | 810621 | 811101 | | 810409 | 810601 |
| END | 810620 | 811031 | 811031 | 811031 | 811031 | 811123 | | 811123 | 820531 |

1982->83

| | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|
| START | 820427 | 820521 | 820521 | 820521 | 820521 | 821201 | | 820427 | 820601 |
| END | 820520 | 821130 | 821130 | 821130 | 821130 | 821213 | | 821213 | 830531 |

1983->84

| | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|
| START | 830425 | 830521 | 830521 | 830521 | 830521 | 831111 | | 830425 | |
| END | 830520 | 831110 | 831110 | 831110 | 831110 | 831118 | | 831118 | |

WESTWARD CALCULATION DATE: 84/07/16

ALKTI Alkalinity, TIA as CaCO3 mg/L

1981->82

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 2.09 | 1.46 | 1.80 | 1.95 | 1.72 | | | 1.76 | 1.73 |
| MIN | I | 2.09 | 1.35 | 1.58 | 1.68 | 1.55 | | | 1.55 | 1.43 |
| MAX | I | 2.09 | 1.63 | 1.90 | 2.29 | 1.92 | | | 2.09 | 2.09 |
| N | I | 1.00 | 7.00 | 7.00 | 7.00 | 7.00 | | | 8.00 | 9.00 |

1982->83

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 1.43 | 1.45 | 1.59 | 1.65 | 1.57 | | | 1.55 | 1.55 |
| MIN | I | 1.43 | 1.34 | 1.46 | 1.54 | 1.49 | | | 1.43 | 1.46 |
| MAX | I | 1.43 | 1.59 | 1.75 | 1.76 | 1.69 | | | 1.69 | 1.69 |
| N | I | 1.00 | 6.00 | 6.00 | 6.00 | 6.00 | | | 7.00 | 7.00 |

1983->84

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 1.46 | 1.42 | 1.60 | 1.81 | 1.61 | | | 1.59 | |
| MIN | I | 1.46 | 1.29 | 1.33 | 1.47 | 1.39 | | | 1.39 | |
| MAX | I | 1.46 | 1.60 | 1.83 | 2.14 | 1.79 | | | 1.79 | |
| N | I | 1.00 | 6.00 | 6.00 | 6.00 | 6.00 | | | 7.00 | |

WESTWARD
ALUT Aluminum ug/L

CALCULATION DATE: 84/07/16

1981->82

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 10.0 | | | | 30.0 | | | 31.3 | 30.3 |
| MIN | I | 10.0 | | | | 1.00 | | | 1.00 | 1.00 |
| MAX | I | 10.0 | | | | 75.0 | | | 75.0 | 75.0 |
| N | I | 1.00 | | | | 2.00 | | | 3.00 | 4.00 |

1982->83

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 27.0 | 16.8 | 12.3 | 16.4 | 15.9 | | | 18.2 | 15.4 |
| MIN | I | 27.0 | 9.00 | 6.00 | 3.00 | 8.77 | | | 8.77 | 8.77 |
| MAX | I | 27.0 | 28.0 | 28.0 | 40.0 | 31.3 | | | 31.3 | 31.3 |
| N | I | 1.00 | 5.00 | 4.00 | 5.00 | 4.00 | | | 5.00 | 5.00 |

1983->84

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 13.0 | 8.00 | 7.50 | 9.50 | 7.91 | | | 8.64 | |
| MIN | I | 13.0 | 1.00 | 3.00 | 7.00 | 3.67 | | | 3.67 | |
| MAX | I | 13.0 | 16.0 | 11.0 | 14.0 | 11.5 | | | 13.0 | |
| N | I | 1.00 | 6.00 | 6.00 | 6.00 | 6.00 | | | 7.00 | |

WESTWARD
CAUR Calcium mg/L

CALCULATION DATE: 84/07/16

1981->82

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 2.20 | 2.27 | 2.31 | 2.30 | 2.29 | | | 2.28 | 2.28 |
| MIN | I | 2.20 | 2.00 | 2.20 | 2.20 | 2.13 | | | 2.13 | 2.13 |
| MAX | I | 2.20 | 2.60 | 2.60 | 2.40 | 2.52 | | | 2.52 | 2.52 |
| N | I | 1.00 | 7.00 | 7.00 | 7.00 | 7.00 | | | 8.00 | 9.00 |

1982->83

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 2.29 | 2.08 | 2.10 | 2.12 | 2.09 | | | 2.12 | 2.15 |
| MIN | I | 2.29 | 1.80 | 1.70 | 1.80 | 1.76 | | | 1.76 | 1.76 |
| MAX | I | 2.29 | 2.30 | 2.30 | 2.30 | 2.30 | | | 2.30 | 2.50 |
| N | I | 1.00 | 6.00 | 6.00 | 6.00 | 6.00 | | | 7.00 | 7.00 |

1983->84

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 2.50 | 2.03 | 2.07 | 2.17 | 2.09 | | | 2.15 | |
| MIN | I | 2.50 | 1.90 | 1.90 | 2.00 | 1.93 | | | 1.93 | |
| MAX | I | 2.50 | 2.20 | 2.20 | 2.30 | 2.25 | | | 2.50 | |
| N | I | 1.00 | 6.00 | 6.00 | 6.00 | 6.00 | | | 7.00 | |

WESTWARD
CLIDUR Chloride mg/L

CALCULATION DATE: 84/07/16

1981->82

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 0.30 | 0.30 | 0.30 | 0.314 | 0.306 | | | 0.305 | 0.299 |
| MIN | I | 0.30 | 0.25 | 0.25 | 0.20 | 0.233 | | | 0.233 | 0.233 |
| MAX | I | 0.30 | 0.40 | 0.35 | 0.35 | 0.374 | | | 0.374 | 0.374 |
| N | I | 1.00 | 7.00 | 7.00 | 7.00 | 7.00 | | | 8.00 | 9.00 |

1982->83

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 0.25 | 0.285 | 0.283 | 0.292 | 0.285 | | | 0.20 | 0.285 |
| MIN | I | 0.25 | 0.25 | 0.25 | 0.25 | 0.25 | | | 0.25 | 0.25 |
| MAX | I | 0.25 | 0.35 | 0.35 | 0.35 | 0.35 | | | 0.35 | 0.35 |
| N | I | 1.00 | 6.00 | 6.00 | 6.00 | 6.00 | | | 7.00 | 7.00 |

1983->84

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 0.20 | 0.242 | 0.237 | 0.26 | 0.246 | | | 0.251 | |
| MIN | I | 0.20 | 0.21 | 0.15 | 0.21 | 0.182 | | | 0.182 | |
| MAX | I | 0.20 | 0.20 | 0.29 | 0.31 | 0.280 | | | 0.280 | |
| N | I | 1.00 | 6.00 | 6.00 | 6.00 | 6.00 | | | 7.00 | |

WESTWARD
COLTR Colour (true)

CALCULATION DATE: 84/07/16

1981->82

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 3.00 | 4.86 | 4.00 | 5.14 | 4.70 | | | 4.56 | 4.53 |
| MIN | I | 3.00 | 2.00 | 2.00 | 2.00 | 2.71 | | | 2.71 | 2.71 |
| MAX | I | 3.00 | 7.00 | 6.00 | 11.0 | 5.97 | | | 5.97 | 5.97 |
| N | I | 1.00 | 7.00 | 7.00 | 7.00 | 7.00 | | | 8.00 | 9.00 |

1982->83

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 4.25 | 4.83 | 4.17 | 5.67 | 4.87 | | | 4.70 | 4.60 |
| MIN | I | 4.25 | 2.00 | 0.00 | 2.00 | 2.00 | | | 2.00 | 2.00 |
| MAX | I | 4.25 | 7.00 | 7.00 | 9.00 | 7.43 | | | 7.43 | 7.43 |
| N | I | 1.00 | 6.00 | 6.00 | 6.00 | 6.00 | | | 7.00 | 7.00 |

1983->84

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 3.00 | 7.83 | 4.33 | 5.67 | 6.15 | | | 5.70 | |
| MIN | I | 3.00 | 0.00 | 2.00 | 4.00 | 2.79 | | | 2.79 | |
| MAX | I | 3.00 | 24.0 | 6.00 | 10.0 | 12.2 | | | 12.2 | |
| N | I | 1.00 | 6.00 | 6.00 | 6.00 | 6.00 | | | 7.00 | |

WESTWARD — CALCULATION DATE: 84/07/16

COND25 Conductivity (25 C)

1981-)82

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-) MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 26.0 | 25.3 | 25.7 | 26.6 | 25.8 | | | 25.9 | 25.8 |
| MIN | I | 26.0 | 24.0 | 25.0 | 26.0 | 25.8 | | | 25.0 | 25.0 |
| MAX | I | 26.0 | 26.0 | 26.0 | 29.0 | 27.2 | | | 27.2 | 27.2 |
| N | I | 1.00 | 7.00 | 7.00 | 7.00 | 7.00 | | | 8.00 | 9.00 |

1982-)83

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-) MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 25.0 | 24.0 | 25.2 | 25.0 | 25.2 | | | 25.2 | 25.2 |
| MIN | I | 25.0 | 24.0 | 25.0 | 25.0 | 24.9 | | | 24.9 | 24.9 |
| MAX | I | 25.0 | 25.0 | 26.0 | 26.0 | 25.4 | | | 25.4 | 25.4 |
| N | I | 1.00 | 6.00 | 6.00 | 6.00 | 6.00 | | | 7.00 | 7.00 |

1983-)84

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-) MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 25.0 | 24.6 | 24.7 | 26.3 | 25.2 | | | 25.1 | |
| MIN | I | 25.0 | 24.0 | 24.0 | 26.0 | 24.8 | | | 24.8 | |
| MAX | I | 25.0 | 25.0 | 25.4 | 27.0 | 25.6 | | | 25.6 | |
| N | I | 1.00 | 6.00 | 6.00 | 6.00 | 6.00 | | | 7.00 | |

WESTWARD — CALCULATION DATE: 84/07/16

DIC Dissolved Inorganic Carbon mg/L

1981-)82

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-) MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 0.78 | 0.743 | 0.714 | 0.857 | 0.773 | | | 0.764 | 0.79 |
| MIN | I | 0.78 | 0.40 | 0.60 | 0.50 | 0.57 | | | 0.57 | 0.57 |
| MAX | I | 0.78 | 1.20 | 1.40 | 1.10 | 1.16 | | | 1.16 | 1.16 |
| N | I | 1.00 | 7.00 | 7.00 | 7.00 | 7.00 | | | 8.00 | 9.00 |

1982-)83

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-) MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 1.00 | 0.482 | 0.795 | 1.36 | 0.818 | | | 0.848 | 0.855 |
| MIN | I | 1.00 | 0.41 | 0.53 | 1.18 | 0.765 | | | 0.765 | 0.765 |
| MAX | I | 1.00 | 0.68 | 1.77 | 1.67 | 0.864 | | | 1.00 | 1.04 |
| N | I | 1.00 | 6.00 | 6.00 | 5.00 | 5.00 | | | 6.00 | 6.00 |

1983-)84

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-) MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 1.04 | 0.412 | 0.708 | 1.66 | 0.904 | | | 0.923 | |
| MIN | I | 1.04 | 0.30 | 0.48 | 1.35 | 0.80 | | | 0.80 | |
| MAX | I | 1.04 | 0.52 | 1.47 | 2.02 | 1.02 | | | 1.04 | |
| N | I | 1.00 | 6.00 | 6.00 | 6.00 | 6.00 | | | 7.00 | |

WESTWARD
DOC Dissolved Organic Carbon mg/L

CALCULATION DATE: 84/07/16

| 1981->82 | | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 1.50 | 1.57 | 1.44 | 1.34 | 1.46 | | | 1.46 | 1.52 |
| MIN | I | 1.50 | 1.30 | 1.30 | 1.10 | 1.33 | | | 1.33 | 1.33 |
| MAX | I | 1.50 | 1.80 | 1.70 | 1.80 | 1.70 | | | 1.70 | 1.97 |
| N | I | 1.00 | 7.00 | 7.00 | 7.00 | 7.00 | | | 8.00 | 9.00 |

| 1982->83 | | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 1.97 | 1.47 | 1.24 | 1.32 | 1.37 | | | 1.47 | 1.38 |
| MIN | I | 1.97 | 1.30 | 0.70 | 1.20 | 1.25 | | | 1.25 | 1.25 |
| MAX | I | 1.97 | 1.70 | 1.60 | 1.40 | 1.55 | | | 1.97 | 1.55 |
| N | I | 1.00 | 6.00 | 5.00 | 5.00 | 5.00 | | | 6.00 | 6.00 |

| 1983->84 | | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 1.40 | 1.72 | 1.55 | 1.33 | 1.56 | | | 1.54 | |
| MIN | I | 1.40 | 1.50 | 1.30 | 1.20 | 1.35 | | | 1.35 | |
| MAX | I | 1.40 | 2.10 | 1.90 | 1.50 | 1.70 | | | 1.70 | |
| N | I | 1.00 | 5.00 | 6.00 | 6.00 | 5.00 | | | 6.00 | |

WESTWARD
FEUT Iron ug/L

CALCULATION DATE: 84/07/16
DETECTION LIMIT USED:5

| 1981->82 | | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 50.0 | 17.1 | 21.4 | 100. | 50.7 | | | 50.6 | 47.0 |
| MIN | I | 50.0 | 10.0 | 10.0 | 10.0 | 10.0 | | | 10.0 | 10.0 |
| MAX | I | 50.0 | 20.0 | 50.0 | 290. | 120. | | | 120. | 120. |
| N | I | 1.00 | 7.00 | 7.00 | 7.00 | 7.00 | | | 8.00 | 9.00 |

| 1982->83 | | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 18.3 | 14.2 | 25.0 | 38.3 | 25.8 | | | 24.7 | 25.7 |
| MIN | I | 18.3 | 5.00 | 5.00 | 5.00 | 12.0 | | | 12.0 | 12.0 |
| MAX | I | 18.3 | 20.0 | 55.0 | 110. | 69.7 | | | 69.7 | 69.7 |
| N | I | 1.00 | 6.00 | 6.00 | 6.00 | 6.00 | | | 7.00 | 7.00 |

| 1983->84 | | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 25.0 | 15.0 | 7.50L | 62.5 | 27.6L | | | 27.2L | |
| MIN | I | 25.0 | 10.0 | 5.00 | 10.0 | 8.55 | | | 8.55 | |
| MAX | I | 25.0 | 25.0 | 15.0 | 120. | 55.0 | | | 55.0 | |
| N | I | 1.00 | 6.00 | 6.00 | 6.00 | 6.00 | | | 7.00 | |

WESTWARD
FFIDUR Fluoride mg/L

CALCULATION DATE: 84/07/16

1983->84

| | I I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | | 34.0 | 33.3 | 33.0 | 33.7 | | | 33.7 | |
| MIN | I | | 31.3 | 31.0 | 31.4 | 31.3 | | | 31.3 | |
| MAX | I | | 37.0 | 35.7 | 36.3 | 36.3 | | | 36.3 | |
| N | I | | 5.00 | 5.00 | 5.00 | 5.00 | | | 5.00 | |

WESTWARD
KKUR Potassium mg/L

CALCULATION DATE: 84/07/16

1981->82

| | I I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 0.35 | 0.337 | 0.313 | 0.323 | 0.33 | | | 0.332 | 0.333 |
| MIN | I | 0.35 | 0.30 | 0.25 | 0.25 | 0.30 | | | 0.30 | 0.30 |
| MAX | I | 0.35 | 0.38 | 0.34 | 0.36 | 0.357 | | | 0.357 | 0.357 |
| N | I | 1.00 | 7.00 | 7.00 | 7.00 | 7.00 | | | 8.00 | 9.00 |

1982->83

| | I I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 0.338 | 0.31 | 0.303 | 0.313 | 0.308 | | | 0.312 | 0.315 |
| MIN | I | 0.338 | 0.28 | 0.28 | 0.30 | 0.287 | | | 0.287 | 0.287 |
| MAX | I | 0.338 | 0.34 | 0.32 | 0.34 | 0.324 | | | 0.338 | 0.36 |
| N | I | 1.00 | 6.00 | 6.00 | 6.00 | 6.00 | | | 7.00 | 7.00 |

1983->84

| | I I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 0.36 | 0.323 | 0.323 | 0.34 | 0.329 | | | 0.333 | |
| MIN | I | 0.36 | 0.28 | 0.28 | 0.30 | 0.287 | | | 0.287 | |
| MAX | I | 0.36 | 0.36 | 0.38 | 0.38 | 0.369 | | | 0.369 | |
| N | I | 1.00 | 6.00 | 6.00 | 6.00 | 6.00 | | | 7.00 | |

WESTWARD
MGUR Magnesium mg/L

CALCULATION DATE: 84/07/16

1981->82

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 0.60 | 0.581 | 0.589 | 0.611 | 0.591 | | | 0.592 | 0.593 |
| MIN | I | 0.60 | 0.50 | 0.55 | 0.55 | 0.54 | | | 0.54 | 0.54 |
| MAX | I | 0.60 | 0.64 | 0.65 | 0.66 | 0.647 | | | 0.647 | 0.647 |
| N | I | 1.00 | 7.00 | 7.00 | 7.00 | 7.00 | | | 8.00 | 9.00 |

1982->83

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 0.60 | 0.583 | 0.59 | 0.597 | 0.588 | | | 0.589 | 0.589 |
| MIN | I | 0.60 | 0.54 | 0.56 | 0.58 | 0.552 | | | 0.552 | 0.552 |
| MAX | I | 0.60 | 0.64 | 0.64 | 0.64 | 0.64 | | | 0.64 | 0.64 |
| N | I | 1.00 | 6.00 | 6.00 | 6.00 | 6.00 | | | 7.00 | 7.00 |

1983->84

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 0.60 | 0.553 | 0.557 | 0.587 | 0.566 | | | 0.571 | |
| MIN | I | 0.60 | 0.50 | 0.52 | 0.54 | 0.527 | | | 0.527 | |
| MAX | I | 0.60 | 0.60 | 0.58 | 0.64 | 0.604 | | | 0.604 | |
| N | I | 1.00 | 6.00 | 6.00 | 6.00 | 6.00 | | | 7.00 | |

WESTWARD
MNUT Manganese ug/L

CALCULATION DATE: 84/07/16

1981->82

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 80.0 | 8.86 | 11.7 | 72.6 | 32.8 | | | 38.7 | 37.3 |
| MIN | I | 80.0 | 6.00 | 8.00 | 24.0 | 14.7 | | | 14.7 | 14.7 |
| MAX | I | 80.0 | 14.0 | 22.0 | 128. | 57.4 | | | 80.0 | 80.0 |
| N | I | 1.00 | 7.00 | 7.00 | 7.00 | 7.00 | | | 8.00 | 9.00 |

1982->83

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 25.9 | 9.00 | 21.3 | 40.7 | 22.0 | | | 22.6 | 20.9 |
| MIN | I | 25.9 | 4.00 | 5.00 | 12.0 | 11.8 | | | 11.8 | 11.8 |
| MAX | I | 25.9 | 20.0 | 56.0 | 56.0 | 30.5 | | | 30.5 | 30.5 |
| N | I | 1.00 | 6.00 | 6.00 | 6.00 | 6.00 | | | 7.00 | 7.00 |

1983->84

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 14.0 | 7.83 | 9.00 | 79.8 | 31.3 | | | 28.8 | |
| MIN | I | 14.0 | 4.00 | 6.00 | 8.00 | 9.48 | | | 9.48 | |
| MAX | I | 14.0 | 16.0 | 13.0 | 155. | 57.2 | | | 57.2 | |
| N | I | 1.00 | 6.00 | 6.00 | 6.00 | 6.00 | | | 7.00 | |

WESTWARD
NAUR Sodium mg/L

CALCULATION DATE: 84/07/16

1981->82

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 0.60 | 0.606 | 0.643 | 0.607 | 0.644 | | | 0.630 | 0.630 |
| MIN | I | 0.60 | 0.50 | 0.50 | 0.40 | 0.47 | | | 0.47 | 0.47 |
| MAX | I | 0.60 | 1.00 | 0.80 | 0.70 | 0.813 | | | 0.813 | 0.813 |
| N | I | 1.00 | 7.00 | 7.00 | 7.00 | 7.00 | | | 8.00 | 9.00 |

1982->83

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 0.633 | 0.458 | 0.45 | 0.475 | 0.463 | | | 0.487 | 0.468 |
| MIN | I | 0.633 | 0.35 | 0.35 | 0.35 | 0.35 | | | 0.35 | 0.35 |
| MAX | I | 0.633 | 0.50 | 0.55 | 0.65 | 0.581 | | | 0.633 | 0.581 |
| N | I | 1.00 | 6.00 | 6.00 | 6.00 | 6.00 | | | 7.00 | 7.00 |

1983->84

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 0.50 | 0.425 | 0.425 | 0.433 | 0.431 | | | 0.441 | |
| MIN | I | 0.50 | 0.40 | 0.40 | 0.35 | 0.397 | | | 0.397 | |
| MAX | I | 0.50 | 0.45 | 0.45 | 0.50 | 0.473 | | | 0.50 | |
| N | I | 1.00 | 6.00 | 6.00 | 6.00 | 6.00 | | | 7.00 | |

WESTWARD
NNHTFR Ammonium as N ug/L

CALCULATION DATE: 84/07/16
DETECTION LIMIT USED:1

1981->82

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 8.00 | 5.57 | 13.0 | 30.9 | 16.8 | | | 15.7 | 14.5 |
| MIN | I | 8.00 | 2.00 | 2.00 | 15.0 | 8.22 | | | 8.00 | 4.91 |
| MAX | I | 8.00 | 10.0 | 23.0 | 52.0 | 23.4 | | | 23.4 | 23.4 |
| N | I | 1.00 | 7.00 | 7.00 | 7.00 | 7.00 | | | 8.00 | 9.00 |

1982->83

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 4.91 | 3.00 | 8.83 | 9.00 | 6.47 | | | 6.24 | 6.97 |
| MIN | I | 4.91 | 1.00 | 1.00 | 2.00 | 2.96 | | | 2.96 | 2.96 |
| MAX | I | 4.91 | 7.00 | 23.0 | 13.0 | 8.07 | | | 8.07 | 10.0 |
| N | I | 1.00 | 6.00 | 6.00 | 6.00 | 6.00 | | | 7.00 | 7.00 |

1983->84

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 10.0 | 2.50L | 10.0 | 12.1 | 7.26L | | | 7.65L | |
| MIN | I | 10.0 | 1.00 | 4.00 | 8.00 | 5.59 | | | 5.59 | |
| MAX | I | 10.0 | 7.00 | 34.0 | 20.0 | 9.96 | | | 10.0 | |
| N | I | 1.00 | 6.00 | 6.00 | 6.00 | 6.00 | | | 7.00 | |

WESTWARD
NNOTFR Nitrate and Nitrite as N ug/L

CALCULATION DATE: 84/07/16

1981->82

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 120. | 88.6 | 107. | 169. | 121. | | | 121. | 129. |
| MIN | I | 120. | 80.0 | 90.0 | 140. | 108. | | | 108. | 108. |
| MAX | I | 120. | 105. | 140. | 205. | 130. | | | 130. | 200. |
| N | I | 1.00 | 7.00 | 7.00 | 7.00 | 7.00 | | | 8.00 | 9.00 |

1982->83

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 200. | 113. | 124. | 193. | 136. | | | 145. | 138. |
| MIN | I | 200. | 73.0 | 92.0 | 180. | 115. | | | 115. | 115. |
| MAX | I | 200. | 165. | 170. | 217. | 165. | | | 200. | 165. |
| N | I | 1.00 | 6.00 | 6.00 | 6.00 | 6.00 | | | 7.00 | 7.00 |

1983->84

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 154. | 70.8 | 94.2 | 168. | 107. | | | 114. | |
| MIN | I | 154. | 20.0 | 74.0 | 150. | 81.7 | | | 81.7 | |
| MAX | I | 154. | 128. | 119. | 193. | 134. | | | 154. | |
| N | I | 1.00 | 6.00 | 6.00 | 6.00 | 6.00 | | | 7.00 | |

WESTWARD
NNTKUR Total Kjeldahl Nitrogen ug/L

CALCULATION DATE: 84/07/16

1981->82

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 165. | 161. | 156. | 169. | 163. | | | 163. | 157. |
| MIN | I | 165. | 120. | 110. | 135. | 141. | | | 141. | 112. |
| MAX | I | 165. | 180. | 185. | 195. | 180. | | | 180. | 180. |
| N | I | 1.00 | 7.00 | 7.00 | 7.00 | 7.00 | | | 8.00 | 9.00 |

1982->83

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 112. | 138. | 142. | 136. | 137. | | | 134. | 137. |
| MIN | I | 112. | 120. | 125. | 120. | 121. | | | 112. | 121. |
| MAX | I | 112. | 150. | 170. | 170. | 163. | | | 163. | 163. |
| N | I | 1.00 | 6.00 | 6.00 | 6.00 | 6.00 | | | 7.00 | 7.00 |

1983->84

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 135. | 139. | 137. | 129. | 137. | | | 137. | |
| MIN | I | 135. | 115. | 120. | 115. | 118. | | | 118. | |
| MAX | I | 135. | 190. | 170. | 150. | 171. | | | 171. | |
| N | I | 1.00 | 6.00 | 6.00 | 6.00 | 6.00 | | | 7.00 | |

WESTWARD — CALCULATION DATE: 84/07/16

PH pH [-LOG(Hydrogen conc'n)]

1981->82

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 6.53 | 6.42 | 6.40 | 6.10 | 6.31 | | | 6.33 | 6.31 |
| MIN | I | 6.53 | 6.24 | 5.91 | 5.88 | 6.13 | | | 6.13 | 6.11 |
| MAX | I | 6.53 | 6.59 | 6.70 | 6.16 | 6.46 | | | 6.53 | 6.53 |
| N | I | 1.00 | 7.00 | 7.00 | 7.00 | 7.00 | | | 8.00 | 9.00 |

1982->83

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 6.11 | 6.49 | 6.33 | 5.93 | 6.27 | | | 6.25 | 6.23 |
| MIN | I | 6.11 | 6.18 | 5.64 | 5.66 | 6.02 | | | 6.02 | 6.00 |
| MAX | I | 6.11 | 6.65 | 6.58 | 6.11 | 6.42 | | | 6.42 | 6.42 |
| N | I | 1.00 | 6.00 | 6.00 | 6.00 | 6.00 | | | 7.00 | 7.00 |

1983->84

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 6.00 | 6.53 | 6.32 | 5.98 | 6.26 | | | 6.22 | |
| MIN | I | 6.00 | 6.36 | 6.02 | 5.83 | 6.12 | | | 6.00 | |
| MAX | I | 6.00 | 6.85 | 6.48 | 5.96 | 6.36 | | | 6.36 | |
| N | I | 1.00 | 6.00 | 6.00 | 6.00 | 6.00 | | | 7.00 | |

WESTWARD — CALCULATION DATE: 84/07/16

PPUT Total Phosphorous ug/L

1981->82

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 3.33 | 3.54 | 3.45 | 4.11 | 3.72 | | | 3.68 | 3.60 |
| MIN | I | 3.33 | 2.53 | 2.90 | 3.30 | 3.25 | | | 3.25 | 3.00 |
| MAX | I | 3.33 | 5.27 | 4.23 | 5.03 | 4.88 | | | 4.88 | 4.88 |
| N | I | 1.00 | 7.00 | 7.00 | 7.00 | 7.00 | | | 8.00 | 9.00 |

1982->83

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 3.00 | 2.65 | 3.82 | 4.17 | 3.61 | | | 3.52 | 3.61 |
| MIN | I | 3.00 | 1.40 | 3.03 | 3.63 | 2.89 | | | 2.89 | 2.89 |
| MAX | I | 3.00 | 3.53 | 5.47 | 5.00 | 4.89 | | | 4.89 | 4.89 |
| N | I | 1.00 | 6.00 | 6.00 | 6.00 | 6.00 | | | 7.00 | 6.00 |

1983->84

| | I | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | | 3.38 | 4.18 | 4.62 | 4.16 | | | 4.16 | |
| MIN | I | | 2.43 | 2.93 | 4.13 | 3.36 | | | 3.36 | |
| MAX | I | | 4.63 | 5.53 | 5.40 | 4.88 | | | 4.88 | |
| N | I | | 6.00 | 6.00 | 6.00 | 6.00 | | | 6.00 | |

WESTWARD
SIO3UR Silicates mg/L

CALCULATION DATE: 84/07/16
DETECTION LIMIT USED: .02

| 1981->82 | | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 0.30 | 0.387 | 0.236 | 0.45 | 0.336 | | | 0.331 | 0.323 |
| MIN | I | 0.30 | 0.20 | 0.10 | 0.30 | 0.242 | | | 0.242 | 0.242 |
| MAX | I | 0.30 | 0.45 | 0.35 | 0.80 | 0.451 | | | 0.451 | 0.451 |
| N | I | 1.00 | 7.00 | 7.00 | 7.00 | 7.00 | | | 8.00 | 9.00 |

| 1982->83 | | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 0.255 | 0.133 | 0.197 | 0.338 | 0.207 | | | 0.214 | 0.214 |
| MIN | I | 0.255 | 0.08 | 0.04 | 0.20 | 0.156 | | | 0.156 | 0.156 |
| MAX | I | 0.255 | 0.22 | 0.52 | 0.42 | 0.268 | | | 0.268 | 0.268 |
| N | I | 1.00 | 6.00 | 6.00 | 6.00 | 6.00 | | | 7.00 | 7.00 |

| 1983->84 | | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 0.26 | 0.102L | 0.0717L | 0.313 | 0.16L | | | 0.174L | |
| MIN | I | 0.26 | 0.02 | 0.02 | 0.22 | 0.101 | | | 0.101 | |
| MAX | I | 0.26 | 0.22 | 0.16 | 0.45 | 0.211 | | | 0.26 | |
| N | I | 1.00 | 6.00 | 6.00 | 6.00 | 6.00 | | | 7.00 | |

WESTWARD
SSO4UR Sulphate as SO4 mg/L

CALCULATION DATE: 84/07/16

| 1981->82 | | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 6.50 | 7.07 | 7.07 | 6.99 | 7.00 | | | 6.93 | 6.95 |
| MIN | I | 6.50 | 6.80 | 6.70 | 6.70 | 6.76 | | | 6.50 | 6.50 |
| MAX | I | 6.50 | 7.30 | 7.50 | 7.50 | 7.26 | | | 7.26 | 7.26 |
| N | I | 1.00 | 6.00 | 7.00 | 7.00 | 6.00 | | | 7.00 | 8.00 |

| 1982->83 | | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 7.12 | 6.66 | 6.49 | 6.63 | 6.61 | | | 6.68 | 6.58 |
| MIN | I | 7.12 | 6.40 | 6.15 | 6.40 | 6.43 | | | 6.43 | 6.43 |
| MAX | I | 7.12 | 7.00 | 6.80 | 6.80 | 6.84 | | | 7.12 | 6.84 |
| N | I | 1.00 | 6.00 | 6.00 | 6.00 | 6.00 | | | 7.00 | 7.00 |

| 1983->84 | | SPRING OVERTURN | EPI | META | HYPO | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|---|---|---|
| MEAN | I | 6.43 | 6.56 | 6.61 | 6.48 | 6.53 | | | 6.52 | |
| MIN | I | 6.43 | 5.84 | 6.05 | 5.92 | 5.93 | | | 5.93 | |
| MAX | I | 6.43 | 7.32 | 7.16 | 7.13 | 7.19 | | | 7.19 | |
| N | I | 1.00 | 6.00 | 6.00 | 6.00 | 6.00 | | | 7.00 | |

Appendix: Lake chlorophyll and secchi disc averages

Table 29 Big Porcupine

BIG PORCUPINE

Calculation date: 84/07/16

1983->84

| | SPRING OVERTURN | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|
| START | 830425 | 830521 | 831101 | | 830425 | |
| END | 830520 | 831031 | 831118 | | 831118 | |

CHLRAC Chlorophyll-A, corrected ug/L

| I | SPRING OVERTURN | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|
| MEAN I | 1.60 | 1.36 | | | 1.40 | |
| MIN I | 1.60 | 0.70 | | | 0.70 | |
| MAX I | 1.60 | 2.60 | | | 2.60 | |
| N I | 1.00 | 5.00 | | | 6.00 | |

CHLRAT Chlorophyll-A ug/L

| I | SPRING OVERTURN | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|
| MEAN I | 1.80 | 1.74 | | | 1.75 | |
| MIN I | 1.80 | 1.10 | | | 1.10 | |
| MAX I | 1.80 | 3.10 | | | 3.10 | |
| N I | 1.00 | 5.00 | | | 6.00 | |

FWSDDP Secchi Disc Depth

| I | SPRING OVERTURN | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|
| MEAN I | 4.50 | 7.04 | | | 6.62 | |
| MIN I | 4.50 | 5.90 | | | 4.50 | |
| MAX I | 4.50 | 9.00 | | | 9.00 | |
| N I | 1.00 | 5.00 | | | 6.00 | |

BONNECHERE

Calculation date: 84/07/16

1983->84

| | SPRING OVERTURN | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|
| START | 830425 | 830521 | 831101 | | 830425 | |
| END | 830520 | 831031 | 831118 | | 831118 | |

CHLRAC Chlorophyll-A, corrected ug/L

| | I | SPRING OVERTURN | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|
| MEAN | I | 1.40 | 1.48 | | | 1.47 | |
| MIN | I | 1.40 | 0.90 | | | 0.90 | |
| MAX | I | 1.40 | 2.40 | | | 2.40 | |
| N | I | 1.00 | 5.00 | | | 6.00 | |

CHLRAT Chlorophyll-A ug/L

| | I | SPRING OVERTURN | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|
| MEAN | I | 1.50 | 1.76 | | | 1.72 | |
| MIN | I | 1.50 | 1.10 | | | 1.10 | |
| MAX | I | 1.50 | 2.60 | | | 2.60 | |
| N | I | 1.00 | 5.00 | | | 6.00 | |

FWSDDP Secchi Disc Depth

| | I | SPRING OVERTURN | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|
| MEAN | I | 4.00 | 5.40 | | | 5.17 | |
| MIN | I | 4.00 | 4.30 | | | 4.00 | |
| MAX | I | 4.00 | 6.00 | | | 6.00 | |
| N | I | 1.00 | 5.00 | | | 6.00 | |

CLEAR

Calculation date: 84/07/16

1978->79

| | SPRING OVERTURN | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|
| START | | | | 790101 | | |
| END | | | | 790421 | | |

1979->80

| | SPRING OVERTURN | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|
| START | 790422 | 790601 | 791201 | | 790422 | 790601 |
| END | 790531 | 791130 | 791213 | | 791213 | 800531 |

1980->81

| | SPRING OVERTURN | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|
| START | 800425 | 800601 | 801101 | 801113 | 800425 | 800601 |
| END | 800531 | 801031 | 801112 | 810408 | 801112 | 810531 |

1981->82

| | SPRING OVERTURN | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|
| START | 810409 | 810521 | 811101 | | 810409 | 810601 |
| END | 810520 | 811031 | 811123 | | 811123 | 820531 |

1982->83

| | SPRING OVERTURN | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|
| START | 820427 | 820521 | 821116 | | 820427 | 820601 |
| END | 820520 | 821115 | 821213 | | 821213 | 830531 |

1983->84

| | SPRING OVERTURN | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|
| START | 830428 | 830521 | 831111 | | 830428 | |
| END | 830520 | 831110 | 831118 | | 831118 | |

CLEAR
CHLRAC Chlorophyll-A, corrected ug/L

CALCULATION DATE: 84/07/16

1978->79

| | I | SPRING OVERTURN | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|
| MEAN | I | | | | 0.10 | | |
| MIN | I | | | | 0.10 | | |
| MAX | I | | | | 0.10 | | |
| N | I | | | | 2.00 | | |

1979->80

| | I | SPRING OVERTURN | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|
| MEAN | I | 1.05 | 1.08 | | | 1.07 | 1.08 |
| MIN | I | 0.90 | 0.40 | | | 0.40 | 0.40 |
| MAX | I | 1.20 | 1.80 | | | 1.80 | 1.80 |
| N | I | 2.00 | 4.00 | | | 6.00 | 4.00 |

1980->81

| | I | SPRING OVERTURN | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|
| MEAN | I | | 1.90 | | | 1.90 | 1.75 |
| MIN | I | | 1.90 | | | 1.90 | 1.60 |
| MAX | I | | 1.90 | | | 1.90 | 1.90 |
| N | I | | 1.00 | | | 1.00 | 2.00 |

1981->82

| | I | SPRING OVERTURN | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|
| MEAN | I | 1.60 | 1.50 | 2.40 | | 1.75 | 1.45 |
| MIN | I | 1.60 | 1.40 | 2.40 | | 1.40 | 0.40 |
| MAX | I | 1.60 | 1.60 | 2.40 | | 2.40 | 2.40 |
| N | I | 1.00 | 2.00 | 1.00 | | 4.00 | 4.00 |

1982->83

| | I | SPRING OVERTURN | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|
| MEAN | I | 0.40 | 1.38 | | | 1.22 | 1.45 |
| MIN | I | 0.40 | 1.10 | | | 0.40 | 1.10 |
| MAX | I | 0.40 | 1.80 | | | 1.80 | 1.80 |
| N | I | 1.00 | 5.00 | | | 6.00 | 6.00 |

1983->84

| | I | SPRING OVERTURN | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|
| MEAN | I | 1.80 | 1.30 | | | 1.38 | |
| MIN | I | 1.80 | 0.90 | | | 0.90 | |
| MAX | I | 1.80 | 1.70 | | | 1.80 | |
| N | I | 1.00 | 5.00 | | | 6.00 | |

CLEAR — CALCULATION DATE: 84/07/16

CHLRAT Chlorophyll-A ug/L

1978->79

| | SPRING OVERTURN | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|
| MEAN | | | | 0.767 | | |
| MIN | | | | 0.30 | | |
| MAX | | | | 1.60 | | |
| N | | | | 3.00 | | |

1979->80

| | SPRING OVERTURN | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|
| MEAN | 1.60 | 1.80 | | | 1.73 | 1.80 |
| MIN | 1.50 | 1.10 | | | 1.10 | 1.10 |
| MAX | 1.70 | 2.50 | | | 2.50 | 2.50 |
| N | 2.00 | 4.00 | | | 6.00 | 4.00 |

1980->81

| | SPRING OVERTURN | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|
| MEAN | | 2.20 | | | 2.20 | 1.95 |
| MIN | | 2.20 | | | 2.20 | 1.70 |
| MAX | | 2.20 | | | 2.20 | 2.20 |
| N | | 1.00 | | | 1.00 | 2.00 |

1981->82

| | SPRING OVERTURN | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|
| MEAN | 1.70 | 1.80 | 2.90 | | 2.05 | 1.80 |
| MIN | 1.70 | 1.80 | 2.90 | | 1.70 | 1.00 |
| MAX | 1.70 | 1.80 | 2.90 | | 2.90 | 2.90 |
| N | 1.00 | 2.00 | 1.00 | | 4.00 | 4.00 |

1982->83

| | SPRING OVERTURN | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|
| MEAN | 1.00 | 1.94 | | | 1.78 | 1.93 |
| MIN | 1.00 | 1.50 | | | 1.00 | 1.50 |
| MAX | 1.00 | 2.30 | | | 2.30 | 2.30 |
| N | 1.00 | 5.00 | | | 6.00 | 6.00 |

1983->84

| | SPRING OVERTURN | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|
| MEAN | 1.90 | 1.52 | | | 1.57 | |
| MIN | 1.90 | 1.00 | | | 1.00 | |
| MAX | 1.90 | 1.80 | | | 1.90 | |
| N | 1.00 | 6.00 | | | 7.00 | |

CLEAR
FWSDDP Secchi Disc Depth

CALCULATION DATE: 84/07/16

1979->80

| | | SPRING OVERTURN | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|
| MEAN | I | 0.00 | 8.65 | | | 0.52 | 8.65 |
| MIN | I | 0.00 | 6.00 | | | 6.00 | 6.00 |
| MAX | I | 0.00 | 10.6 | | | 10.6 | 10.6 |
| N | I | 1.00 | 4.00 | | | 5.00 | 4.00 |

1980->81

| | | SPRING OVERTURN | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|
| MEAN | I | | 0.00 | | | 0.00 | 7.15 |
| MIN | I | | 0.00 | | | 0.00 | 5.50 |
| MAX | I | | 0.00 | | | 0.00 | 0.00 |
| N | I | | 1.00 | | | 1.00 | 2.00 |

1981->82

| | | SPRING OVERTURN | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|
| MEAN | I | 5.50 | 0.20 | 7.00 | | 7.60 | 0.10 |
| MIN | I | 5.50 | 5.10 | 7.00 | | 5.10 | 5.10 |
| MAX | I | 5.50 | 9.00 | 7.00 | | 9.00 | 9.00 |
| N | I | 1.00 | 4.00 | 1.00 | | 6.00 | 6.00 |

1982->83

| | | SPRING OVERTURN | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|
| MEAN | I | 8.50 | 8.63 | | | 8.60 | 9.00 |
| MIN | I | 8.50 | 7.00 | | | 7.00 | 7.00 |
| MAX | I | 8.50 | 10.0 | | | 10.0 | 10.5 |
| N | I | 1.00 | 4.00 | | | 5.00 | 5.00 |

1983->84

| | | SPRING OVERTURN | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|
| MEAN | I | 10.5 | 9.13 | | | 9.33 | |
| MIN | I | 10.5 | 7.00 | | | 7.00 | |
| MAX | I | 10.5 | 12.6 | | | 12.6 | |
| N | I | 1.00 | 6.00 | | | 7.00 | |

Table 31 con't

CROWN

Calculation date: 84/07/16

1983->84

| | SPRING OVERTURN | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|
| START | 830425 | 830521 | 831101 | | 830425 | |
| END | 830520 | 831031 | 831118 | | 831118 | |

CHLRAC Chlorophyll-A, corrected ug/L

| | I | SPRING OVERTURN | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|
| MEAN | I | 0.90 | 1.20 | | | 1.15 | |
| MIN | I | 0.90 | 0.40 | | | 0.40 | |
| MAX | I | 0.90 | 2.00 | | | 2.00 | |
| N | I | 1.00 | 5.00 | | | 6.00 | |

CHLRAT Chlorophyll-A ug/L

| | I | SPRING OVERTURN | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|
| MEAN | I | 1.00 | 1.38 | 1.60 | | 1.36 | |
| MIN | I | 1.00 | 0.60 | 1.60 | | 0.60 | |
| MAX | I | 1.00 | 2.00 | 1.60 | | 2.00 | |
| N | I | 1.00 | 5.00 | 1.00 | | 7.00 | |

FWSDDP Secchi Disc Depth

| | I | SPRING OVERTURN | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|
| MEAN | I | 8.00 | 7.26 | 6.20 | | 7.21 | |
| MIN | I | 8.00 | 6.50 | 6.20 | | 6.20 | |
| MAX | I | 8.00 | 8.50 | 6.20 | | 8.50 | |
| N | I | 1.00 | 5.00 | 1.00 | | 7.00 | |

DELANO

Calculation date: 84/07/16

1982->83

| | SPRING OVERTURN | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|
| START | 820427 | 820521 | 821116 | | 820427 | 820601 |
| END | 820520 | 821115 | 821213 | | 821213 | 830531 |

1983->84

| | SPRING OVERTURN | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|
| START | 830425 | 830521 | 831101 | | 830425 | |
| END | 830520 | 831031 | 831118 | | 831118 | |

DELANO

CALCULATION DATE: 84/07/16

CHLRAC Chlorophyll-A, corrected ug/L

1982->83

| | I | SPRING OVERTURN | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|
| MEAN | I | 0.60 | 2.66 | | | 2.40 | 2.53 |
| MIN | I | 0.60 | 0.40 | | | 0.40 | 0.40 |
| MAX | I | 0.60 | 4.70 | | | 4.70 | 4.70 |
| N | I | 1.00 | 7.00 | | | 8.00 | 8.00 |

1983->84

| | I | SPRING OVERTURN | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|
| MEAN | I | 1.60 | 2.20 | | | 2.05 | |
| MIN | I | 1.60 | 2.10 | | | 1.60 | |
| MAX | I | 1.60 | 2.30 | | | 2.30 | |
| N | I | 1.00 | 3.00 | | | 4.00 | |

DELANO
CHLRAT Chlorophyll-A ug/L

CALCULATION DATE: 84/07/16

1982->83

| | SPRING OVERTURN | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|
| MEAN | 1.20 | 3.73 | | | 3.41 | 3.51 |
| MIN | 1.20 | 2.20 | | | 1.20 | 2.00 |
| MAX | 1.20 | 5.90 | | | 5.90 | 5.90 |
| N | 1.00 | 7.00 | | | 8.00 | 8.00 |

1983->84

| | SPRING OVERTURN | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|
| MEAN | 2.00 | 2.67 | | | 2.50 | |
| MIN | 2.00 | 2.50 | | | 2.00 | |
| MAX | 2.00 | 2.80 | | | 2.80 | |
| N | 1.00 | 3.00 | | | 4.00 | |

DELANO
FWSDDP Secchi Disc Depth

CALCULATION DATE: 84/07/16

1982->83

| | SPRING OVERTURN | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|
| MEAN | 3.00 | 3.98 | | | 3.77 | 3.86 |
| MIN | 3.00 | 2.90 | | | 2.90 | 2.90 |
| MAX | 3.00 | 5.00 | | | 5.00 | 5.00 |
| N | 1.00 | 6.00 | | | 7.00 | 7.00 |

1983->84

| | SPRING OVERTURN | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|
| MEAN | 3.60 | 3.70 | | | 3.68 | |
| MIN | 3.60 | 3.10 | | | 3.10 | |
| MAX | 3.60 | 4.20 | | | 4.20 | |
| N | 1.00 | 4.00 | | | 5.00 | |

KIMBALL

Calculation date: 84/07/16

1983->84

| | SPRING OVERTURN | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|
| START | 830425 | 830521 | 831101 | | 830425 | |
| END | 830520 | 831031 | 831118 | | 831118 | |

CHLRAC Chlorophyll-A, corrected ug/L

| I I | SPRING OVERTURN | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|
| MEAN I | 1.00 | 1.04 | | | 1.03 | |
| MIN I | 1.00 | 0.70 | | | 0.70 | |
| MAX I | 1.00 | 1.70 | | | 1.70 | |
| N I | 1.00 | 5.00 | | | 6.00 | |

CHLRAT Chlorophyll-A ug/L

| I I | SPRING OVERTURN | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|
| MEAN I | 1.20 | 1.40 | | | 1.37 | |
| MIN I | 1.20 | 1.00 | | | 1.00 | |
| MAX I | 1.20 | 2.10 | | | 2.10 | |
| N I | 1.00 | 5.00 | | | 6.00 | |

FWSDDP Secchi Disc Depth

| I I | SPRING OVERTURN | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|
| MEAN I | 7.50 | 7.18 | | | 7.24 | |
| MIN I | 7.50 | 6.30 | | | 6.30 | |
| MAX I | 7.50 | 8.00 | | | 8.00 | |
| N I | 1.00 | 4.00 | | | 5.00 | |

Table 34 Kimball Lake

LOUISA

Calculation date: 84/07/16

1981->82

| | SPRING OVERTURN | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|
| START | 810409 | 810622 | 811021 | 811124 | 810409 | 810601 |
| END | 810621 | 811020 | 811123 | 820330 | 811123 | 820531 |

1982->83

| | SPRING OVERTURN | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|
| START | 820427 | 820521 | 821201 | | 820427 | 820601 |
| END | 820520 | 821130 | 821213 | | 821213 | 830531 |

1983->84

| | SPRING OVERTURN | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|
| START | 830425 | 830521 | 831101 | | 830425 | |
| END | 830520 | 831031 | 831118 | | 831118 | |

LOUISA

CALCULATION DATE: 84/07/16

CHLRAC Chlorophyll-A, corrected ug/L

1981->82

| I I | SPRING OVERTURN | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|
| MEAN I | 0.70 | 0.78 | 0.10 | 0.50 | 0.671 | 0.644 |
| MIN I | 0.70 | 0.40 | 0.10 | 0.50 | 0.10 | 0.10 |
| MAX I | 0.70 | 1.40 | 0.10 | 0.50 | 1.40 | 1.40 |
| N I | 1.00 | 5.00 | 1.00 | 1.00 | 7.00 | 9.00 |

1982->83

| I I | SPRING OVERTURN | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|
| MEAN I | 0.60 | 0.80 | | | 0.767 | 0.75 |
| MIN I | 0.60 | 0.20 | | | 0.20 | 0.20 |
| MAX I | 0.60 | 1.40 | | | 1.40 | 1.40 |
| N I | 1.00 | 5.00 | | | 6.00 | 6.00 |

1983->84

| I I | SPRING OVERTURN | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|
| MEAN I | 0.50 | 1.05 | | | 0.94 | |
| MIN I | 0.50 | 0.50 | | | 0.50 | |
| MAX I | 0.50 | 1.90 | | | 1.90 | |
| N I | 1.00 | 4.00 | | | 5.00 | |

LOUISA
CHLRAT Chlorophyll-A ug/L

CALCULATION DATE: 84/07/16

1981->82

| | I | SPRING OVERTURN | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|
| MEAN | I | 0.80 | 1.26 | 1.40 | 0.60 | 1.21 | 1.10 |
| MIN | I | 0.80 | 0.70 | 1.40 | 0.60 | 0.70 | 0.60 |
| MAX | I | 0.80 | 2.00 | 1.40 | 0.60 | 2.00 | 2.00 |
| N | I | 1.00 | 5.00 | 1.00 | 1.00 | 7.00 | 9.00 |

1982->83

| | I | SPRING OVERTURN | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|
| MEAN | I | 0.80 | 1.34 | | | 1.25 | 1.28 |
| MIN | I | 0.80 | 0.90 | | | 0.80 | 0.90 |
| MAX | I | 0.80 | 1.90 | | | 1.90 | 1.90 |
| N | I | 1.00 | 5.00 | | | 6.00 | 6.00 |

1983->84

| | I | SPRING OVERTURN | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|
| MEAN | I | 1.00 | 1.48 | | | 1.38 | |
| MIN | I | 1.00 | 0.70 | | | 0.70 | |
| MAX | I | 1.00 | 2.30 | | | 2.30 | |
| N | I | 1.00 | 4.00 | | | 5.00 | |

LOUISA
FWSDDP Secchi Disc Depth

CALCULATION DATE: 84/07/16

1981->82

| | I | SPRING OVERTURN | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|
| MEAN | I | 8.20 | 5.96 | 5.40 | | 6.20 | 6.18 |
| MIN | I | 8.20 | 5.00 | 5.40 | | 5.00 | 5.00 |
| MAX | I | 8.20 | 7.10 | 5.40 | | 8.20 | 8.20 |
| N | I | 1.00 | 5.00 | 1.00 | | 7.00 | 8.00 |

1982->83

| | I | SPRING OVERTURN | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|
| MEAN | I | 6.00 | 7.47 | | | 7.26 | 7.26 |
| MIN | I | 6.00 | 6.00 | | | 6.00 | 6.00 |
| MAX | I | 6.00 | 11.0 | | | 11.0 | 11.0 |
| N | I | 1.00 | 6.00 | | | 7.00 | 7.00 |

1983->84

| | I | SPRING OVERTURN | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|
| MEAN | I | 6.00 | 7.13 | | | 6.90 | |
| MIN | I | 6.00 | 5.60 | | | 5.60 | |
| MAX | I | 6.00 | 9.40 | | | 9.40 | |
| N | I | 1.00 | 4.00 | | | 5.00 | |

NUNIKANI

Calculation date: 84/07/16

1983->84

| | SPRING OVERTURN | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|
| START | 830425 | 830521 | 831101 | | 830425 | |
| END | 830520 | 831031 | 831118 | | 831118 | |

CHLRAC Chlorophyll-A, corrected ug/L

| | I I | SPRING OVERTURN | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|
| MEAN | I | 1.60 | 1.30 | | | 1.35 | |
| MIN | I | 1.60 | 1.00 | | | 1.00 | |
| MAX | I | 1.60 | 1.90 | | | 1.90 | |
| N | I | 1.00 | 5.00 | | | 6.00 | |

CHLRAT Chlorophyll-A ug/L

| | I I | SPRING OVERTURN | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|
| MEAN | I | 1.90 | 1.60 | | | 1.65 | |
| MIN | I | 1.90 | 1.20 | | | 1.20 | |
| MAX | I | 1.90 | 2.10 | | | 2.10 | |
| N | I | 1.00 | 5.00 | | | 6.00 | |

FWSDDP Secchi Disc Depth

| | I I | SPRING OVERTURN | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|
| MEAN | I | 6.00 | 6.58 | | | 6.48 | |
| MIN | I | 6.00 | 6.00 | | | 6.00 | |
| MAX | I | 6.00 | 7.40 | | | 7.40 | |
| N | I | 1.00 | 5.00 | | | 6.00 | |

Table 36 Nunikani Lake

SHERBORNE

Calculation date: 84/07/16

1982->83

| | SPRING OVERTURN | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|
| START | 820429 | 820601 | 821111 | | 820429 | 820601 |
| END | 820531 | 821110 | 821211 | | 821211 | 830531 |

1983->84

| | SPRING OVERTURN | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|
| START | 830425 | 830521 | 831101 | | 830425 | |
| END | 830520 | 831031 | 831118 | | 831118 | |

SHERBORNE

CALCULATION DATE: 84/07/16

CHLRAC Chlorophyll-A, corrected ug/L

1982->83

| | I | SPRING OVERTURN | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|
| MEAN | I | | 0.875 | | | 0.875 | 0.92 |
| MIN | I | | 0.30 | | | 0.30 | 0.30 |
| MAX | I | | 1.20 | | | 1.20 | 1.20 |
| N | I | | 4.00 | | | 4.00 | 5.00 |

1983->84

| | I | SPRING OVERTURN | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|
| MEAN | I | 1.10 | 1.64 | 1.20 | | 1.50 | |
| MIN | I | 1.10 | 0.70 | 1.20 | | 0.70 | |
| MAX | I | 1.10 | 2.30 | 1.20 | | 2.30 | |
| N | I | 1.00 | 5.00 | 1.00 | | 7.00 | |

SHERBORNE CALCULATION DATE: 84/07/16
CHLRAT Chlorophyll-A ug/L

1982->83

| | I | SPRING OVERTURN | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|
| MEAN | I | | 1.23 | | | 1.23 | 1.24 |
| MIN | I | | 0.70 | | | 0.70 | 0.70 |
| MAX | I | | 1.50 | | | 1.50 | 1.50 |
| N | I | | 4.00 | | | 4.00 | 5.00 |

1983->84

| | I | SPRING OVERTURN | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|
| MEAN | I | 1.30 | 2.06 | 1.30 | | 1.84 | |
| MIN | I | 1.30 | 0.90 | 1.30 | | 0.90 | |
| MAX | I | 1.30 | 3.20 | 1.30 | | 3.20 | |
| N | I | 1.00 | 5.00 | 1.00 | | 7.00 | |

SHERBORNE CALCULATION DATE: 84/07/16
FWSDDP Secchi Disc Depth

1982->83

| | I | SPRING OVERTURN | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|
| MEAN | I | | 7.58 | | | 7.58 | 7.26 |
| MIN | I | | 6.80 | | | 6.80 | 6.00 |
| MAX | I | | 8.00 | | | 8.00 | 8.00 |
| N | I | | 4.00 | | | 4.00 | 5.00 |

1983->84

| | I | SPRING OVERTURN | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|
| MEAN | I | 6.00 | 6.98 | 5.50 | | 6.63 | |
| MIN | I | 6.00 | 6.00 | 5.50 | | 5.50 | |
| MAX | I | 6.00 | 9.00 | 5.50 | | 9.00 | |
| N | I | 1.00 | 5.00 | 1.00 | | 7.00 | |

SMOKE

Calculation date: 84/07/16

| 1981->82 | SPRING OVERTURN | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|
| START | 810409 | 810621 | 811021 | 811124 | 810409 | 810601 |
| END | 810620 | 811020 | 811123 | 820426 | 811123 | 820531 |

| 1982->83 | SPRING OVERTURN | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|
| START | 820427 | 820521 | 821101 | | 820427 | 820601 |
| END | 820520 | 821031 | 821213 | | 821213 | 830531 |

| 1983->84 | SPRING OVERTURN | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|
| START | 830425 | 830521 | 831101 | | 830425 | |
| END | 830520 | 831031 | 831118 | | 831118 | |

SMOKE

CALCULATION DATE: 84/07/16

CHLRAC Chlorophyll-A, corrected ug/L

| 1981->82 | I | SPRING OVERTURN | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|
| MEAN | I | 2.00 | 1.64 | 1.10 | 0.30 | 1.61 | 1.36 |
| MIN | I | 2.00 | 0.90 | 1.10 | 0.30 | 0.90 | 0.30 |
| MAX | I | 2.00 | 2.50 | 1.10 | 0.30 | 2.50 | 2.50 |
| N | I | 1.00 | 5.00 | 1.00 | 1.00 | 7.00 | 9.00 |

| 1982->83 | I | SPRING OVERTURN | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|
| MEAN | I | 0.60 | 2.56 | 1.20 | | 2.09 | 2.33 |
| MIN | I | 0.60 | 1.30 | 1.20 | | 0.60 | 1.20 |
| MAX | I | 0.60 | 4.20 | 1.20 | | 4.20 | 4.20 |
| N | I | 1.00 | 5.00 | 1.00 | | 7.00 | 7.00 |

| 1983->84 | I | SPRING OVERTURN | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|
| MEAN | I | 2.30 | 2.20 | | | 2.22 | |
| MIN | I | 2.30 | 1.60 | | | 1.60 | |
| MAX | I | 2.30 | 3.20 | | | 3.20 | |
| N | I | 1.00 | 5.00 | | | 6.00 | |

Table 38 Smoke Lake

SMOKE
CHLRAT Chlorophyll-A ug/L

CALCULATION DATE: 84/07/16

1981->82

| | I | SPRING OVERTURN | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|
| MEAN | I | 2.70 | 2.47 | 1.50 | 1.50 | 2.38 | 2.16 |
| MIN | I | 2.70 | 1.80 | 1.50 | 1.50 | 1.50 | 1.10 |
| MAX | I | 2.70 | 3.40 | 1.50 | 1.50 | 3.40 | 3.40 |
| N | I | 1.00 | 6.00 | 1.00 | 1.00 | 8.00 | 10.0 |

1982->83

| | I | SPRING OVERTURN | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|
| MEAN | I | 1.10 | 3.30 | 1.60 | | 2.74 | 2.96 |
| MIN | I | 1.10 | 1.80 | 1.60 | | 1.10 | 1.60 |
| MAX | I | 1.10 | 5.50 | 1.60 | | 5.50 | 5.50 |
| N | I | 1.00 | 5.00 | 1.00 | | 7.00 | 7.00 |

1983->84

| | I | SPRING OVERTURN | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|
| MEAN | I | 2.60 | 2.46 | | | 2.48 | |
| MIN | I | 2.60 | 1.80 | | | 1.80 | |
| MAX | I | 2.60 | 3.50 | | | 3.50 | |
| N | I | 1.00 | 5.00 | | | 6.00 | |

SMOKE
FWSDDP Secchi Disc Depth

CALCULATION DATE: 84/07/16

1981->82

| | I | SPRING OVERTURN | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|
| MEAN | I | 5.60 | 4.83 | 5.20 | | 4.98 | 5.04 |
| MIN | I | 5.60 | 3.50 | 5.20 | | 3.50 | 3.50 |
| MAX | I | 5.60 | 5.80 | 5.20 | | 5.80 | 5.80 |
| N | I | 1.00 | 6.00 | 1.00 | | 8.00 | 9.00 |

1982->83

| | I | SPRING OVERTURN | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|
| MEAN | I | 5.60 | 4.98 | 5.40 | | 5.13 | 5.04 |
| MIN | I | 5.60 | 4.40 | 5.40 | | 4.40 | 4.40 |
| MAX | I | 5.60 | 6.50 | 5.40 | | 6.50 | 6.50 |
| N | I | 1.00 | 5.00 | 1.00 | | 7.00 | 7.00 |

1983->84

| | I | SPRING OVERTURN | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|
| MEAN | I | 5.00 | 4.98 | | | 4.98 | |
| MIN | I | 5.00 | 3.90 | | | 3.90 | |
| [illegible] | | | 5.80 | | | [illegible] | |
| N | I | 1.00 | 5.00 | | | [illegible] | |

TIMBERWOLF

Calculation date: 84/07/16

1982->83

| | SPRING OVERTURN | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|
| START | 820427 | 820521 | 821101 | | 820427 | 820601 |
| END | 820520 | 821031 | 821213 | | 821213 | 830531 |

1983->84

| | SPRING OVERTURN | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|
| START | 830425 | 830521 | 831101 | | 830425 | |
| END | 830520 | 831031 | 831118 | | 831118 | |

TIMBERWOLF

CALCULATION DATE: 84/07/16

CHLRAC Chlorophyll-A, corrected ug/L

1982->83

| | I | SPRING OVERTURN | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|
| MEAN | I | 0.70 | 2.13 | 2.00 | | 1.87 | 2.02 |
| MIN | I | 0.70 | 1.00 | 2.00 | | 0.70 | 1.00 |
| MAX | I | 0.70 | 2.70 | 2.00 | | 2.70 | 2.70 |
| N | I | 1.00 | 4.00 | 1.00 | | 6.00 | 6.00 |

1983->84

| | I | SPRING OVERTURN | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|
| MEAN | I | 1.60 | 3.80 | | | 3.36 | |
| MIN | I | 1.60 | 2.90 | | | 1.60 | |
| MAX | I | 1.60 | 4.60 | | | 4.60 | |
| N | I | 1.00 | 4.00 | | | 5.00 | |

TIMBERWOLF CALCULATION DATE: 84/07/16
CHLRAT Chlorophyll-A ug/L

1982->83

| | I | SPRING OVERTURN | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|
| MEAN | I | 1.10 | 2.83 | 2.60 | | 2.50 | 2.65 |
| MIN | I | 1.10 | 1.20 | 2.60 | | 1.10 | 1.20 |
| MAX | I | 1.10 | 3.60 | 2.60 | | 3.60 | 3.60 |
| N | I | 1.00 | 4.00 | 1.00 | | 6.00 | 6.00 |

1983->84

| | I | SPRING OVERTURN | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1 -> MAY 31 |
|---|---|---|---|---|---|---|---|
| MEAN | I | 2.00 | 4.25 | | | 3.80 | |
| MIN | I | 2.00 | 3.20 | | | 2.00 | |
| MAX | I | 2.00 | 5.10 | | | 5.10 | |
| N | I | 1.00 | 4.00 | | | 5.00 | |

TIMBERWOLF CALCULATION DATE: 84/07/16
FWSDDP Secchi Disc Depth

1982->83

| | I | SPRING OVERTURN | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1 -> MAY 31 |
|---|---|---|---|---|---|---|---|
| MEAN | I | 3.50 | 4.98 | 3.40 | | 4.47 | 4.30 |
| MIN | I | 3.50 | 3.80 | 3.40 | | 3.40 | 3.00 |
| MAX | I | 3.50 | 6.70 | 3.40 | | 6.70 | 6.70 |
| N | I | 1.00 | 4.00 | 1.00 | | 6.00 | 6.00 |

1983->84

| | I | SPRING OVERTURN | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1 -> MAY 31 |
|---|---|---|---|---|---|---|---|
| MEAN | I | 3.00 | 4.24 | | | 4.03 | |
| MIN | I | 3.00 | 3.70 | | | 3.00 | |
| MAX | I | 3.00 | 5.20 | | | 5.20 | |
| N | I | 1.00 | 5.00 | | | 6.00 | |

WESTWARD

Calculation date: 84/07/16

1981->82

| | SPRING OVERTURN | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|
| START | 810409 | 810621 | 811101 | | 810409 | 810601 |
| END | 810620 | 811031 | 811123 | | 811123 | 820531 |

1982->83

| | SPRING OVERTURN | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|
| START | 820427 | 820521 | 821201 | | 820427 | 820601 |
| END | 820520 | 821130 | 821213 | | 821213 | 830531 |

1983->84

| | SPRING OVERTURN | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|
| START | 830425 | 830521 | 831111 | | 830425 | |
| END | 830520 | 831110 | 831118 | | 831118 | |

Table 40 Westward Lake



WESTWARD

CALCULATION DATE: 84/07/16

CHLRAC Chlorophyll-A, corrected ug/l

1981->82

| | I | SPRING OVERTURN | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|
| MEAN | I | 1.40 | 0.65 | | | 0.757 | 0.757 |
| MIN | I | 1.40 | 0.30 | | | 0.30 | 0.30 |
| MAX | I | 1.40 | 1.10 | | | 1.40 | 1.40 |
| N | I | 1.00 | 6.00 | | | 7.00 | 7.00 |

1982->83

| | I | SPRING OVERTURN | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|
| MEAN | I | | 1.00 | | | 1.00 | 1.04 |
| MIN | I | | 0.60 | | | 0.60 | 0.60 |
| MAX | I | | 1.30 | | | 1.30 | 1.30 |
| N | I | | 6.00 | | | 6.00 | 7.00 |

1983->84

| | I | SPRING OVERTURN | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|
| MEAN | I | 1.30 | 1.96 | | | 1.85 | |
| MIN | I | 1.30 | 1.00 | | | 1.00 | |
| MAX | I | 1.30 | 4.20 | | | 4.20 | |
| N | I | 1.00 | 5.00 | | | 6.00 | |

WESTWARD
CHLRAT Chlorophyll-A ug/L

CALCULATION DATE: 84/07/16

1981->82

| | I | SPRING OVERTURN | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|
| MEAN | I | 1.80 | 1.02 | | | 1.13 | 1.13 |
| MIN | I | 1.80 | 0.80 | | | 0.80 | 0.80 |
| MAX | I | 1.80 | 1.50 | | | 1.80 | 1.80 |
| N | I | 1.00 | 6.00 | | | 7.00 | 7.00 |

1982->83

| | I | SPRING OVERTURN | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|
| MEAN | I | | 1.30 | | | 1.30 | 1.36 |
| MIN | I | | 0.90 | | | 0.90 | 0.90 |
| MAX | I | | 1.60 | | | 1.60 | 1.70 |
| N | I | | 6.00 | | | 6.00 | 7.00 |

1983->84

| | I | SPRING OVERTURN | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|
| MEAN | I | 1.70 | 2.88 | | | 2.71 | |
| MIN | I | 1.70 | 1.20 | | | 1.20 | |
| MAX | I | 1.70 | 6.70 | | | 6.70 | |
| N | I | 1.00 | 6.00 | | | 7.00 | |

WESTWARD
FWSDDP Secchi Disc Depth

CALCULATION DATE: 84/07/16

1981->82

| | I | SPRING OVERTURN | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|
| MEAN | I | 11.0 | 8.18 | | | 8.65 | 8.65 |
| MIN | I | 11.0 | 6.50 | | | 6.50 | 6.50 |
| MAX | I | 11.0 | 11.2 | | | 11.2 | 11.2 |
| N | I | 1.00 | 5.00 | | | 6.00 | 6.00 |

1982->83

| | I | SPRING OVERTURN | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|
| MEAN | I | | 9.25 | | | 9.25 | 9.00 |
| MIN | I | | 7.60 | | | 7.60 | 7.60 |
| MAX | I | | 11.0 | | | 11.0 | 11.0 |
| N | I | | 4.00 | | | 4.00 | 5.00 |

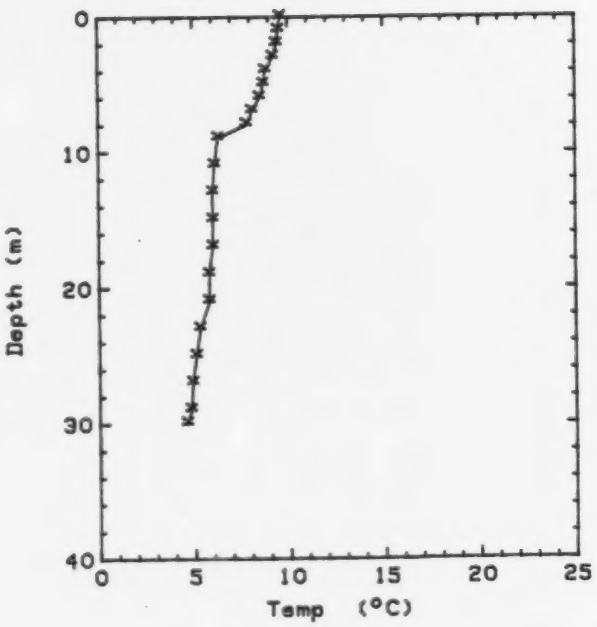
1983->84

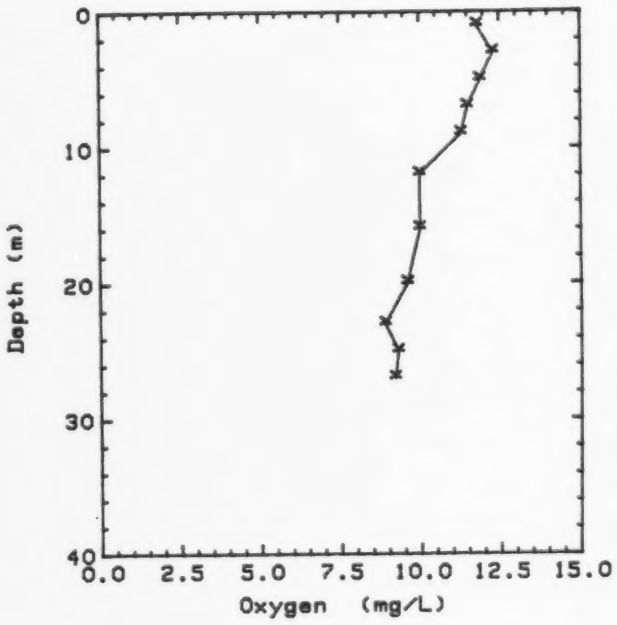
| | I | SPRING OVERTURN | SUMMER STRAT | FALL OVERTURN | ICE COVER | ICE FREE | JUNE 1-> MAY 31 |
|---|---|---|---|---|---|---|---|
| MEAN | I | 8.00 | 6.20 | | | 6.46 | |
| MIN | I | 8.00 | 2.90 | | | 2.90 | |
| MAX | I | 8.00 | 9.60 | | | 9.60 | |
| N | I | | 6.00 | | | | |

Appendix v: Lake temperature, oxygen, pH and dissolved inorganic carbon plots

Table 41

# BIG PORCUPINE LAKE 83.05.17



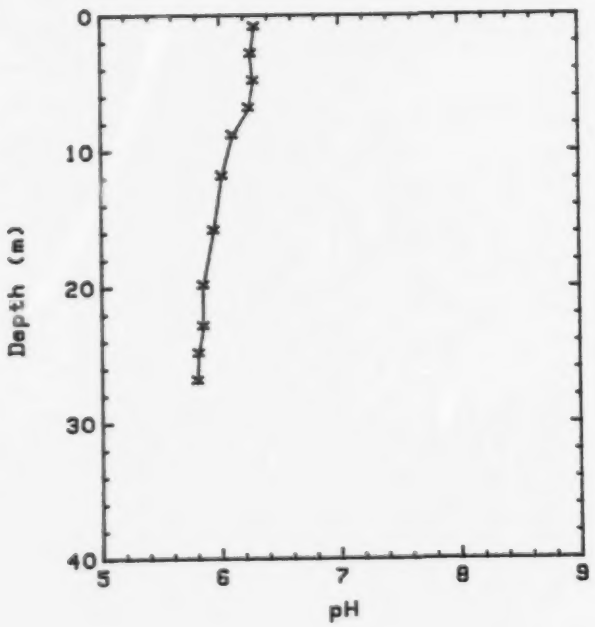
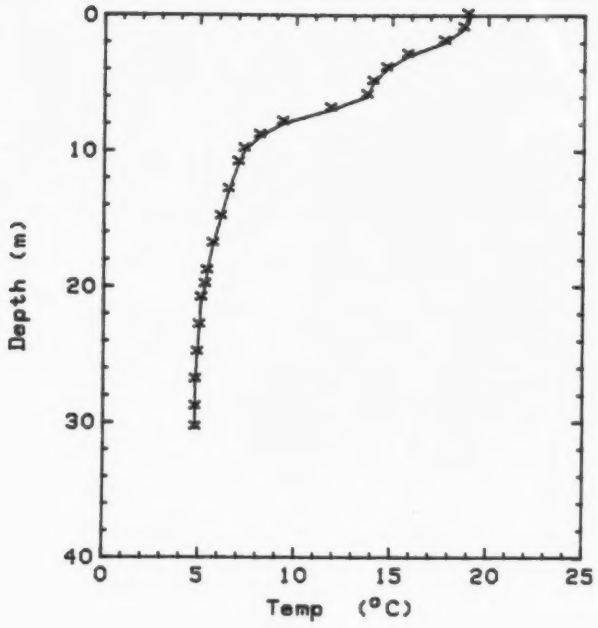
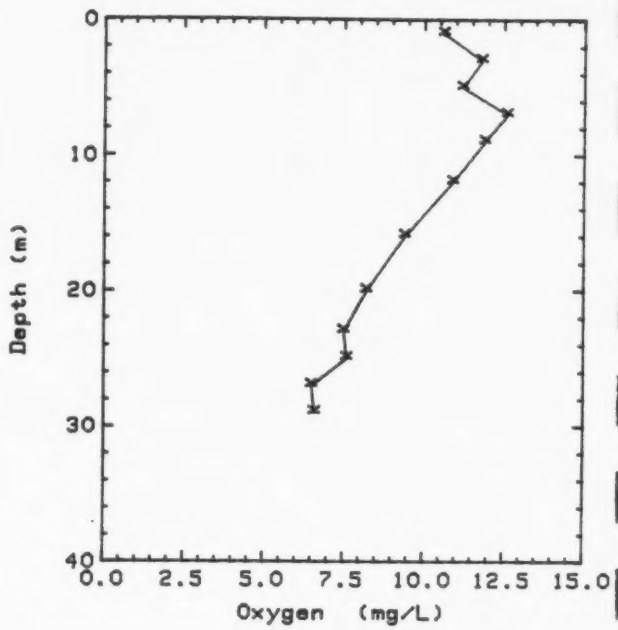



Table 41 con't

# BIG PORCUPINE LAKE 83.06.14



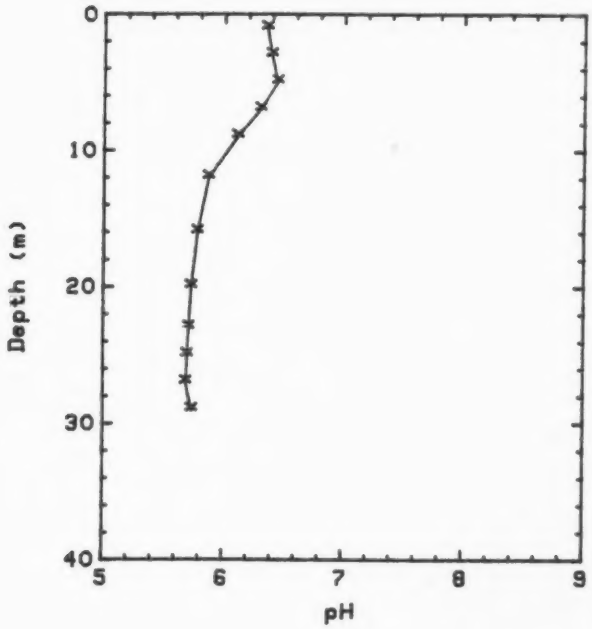
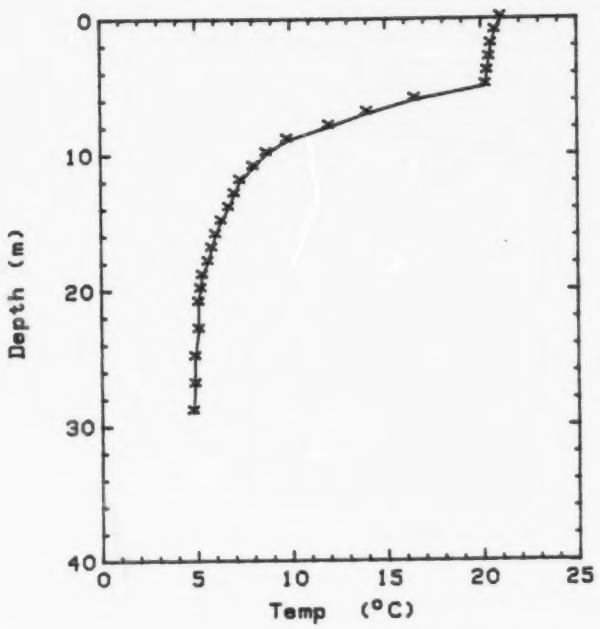
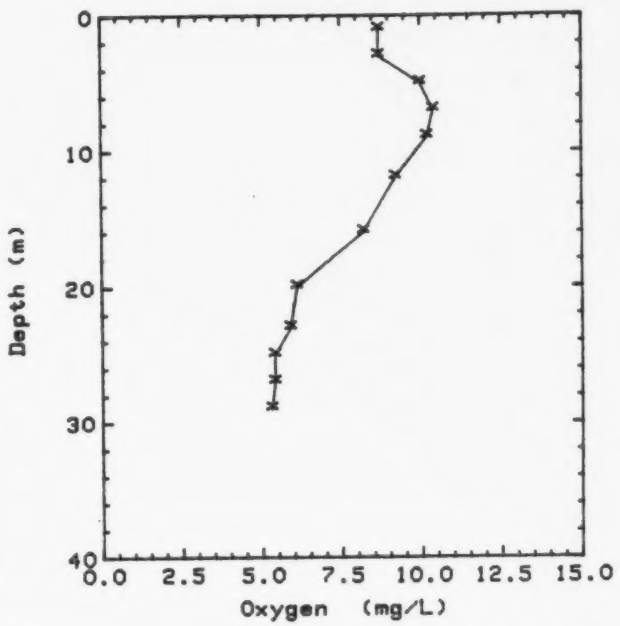



Table 41 con't

# BIG PORCUPINE LAKE 83.07.12



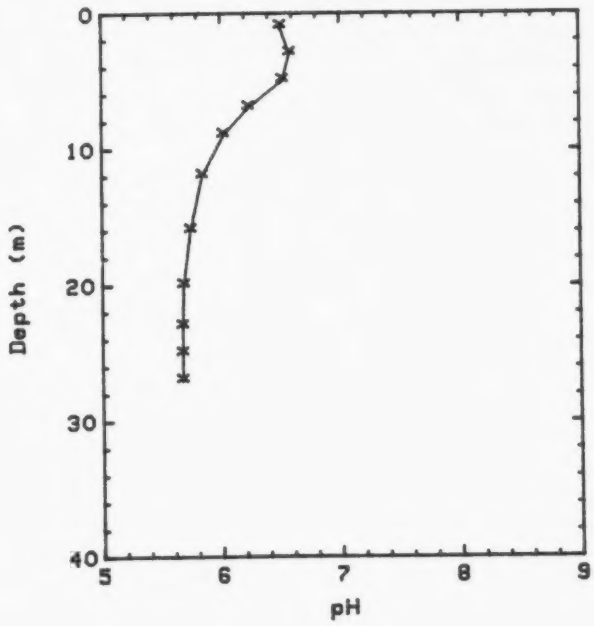
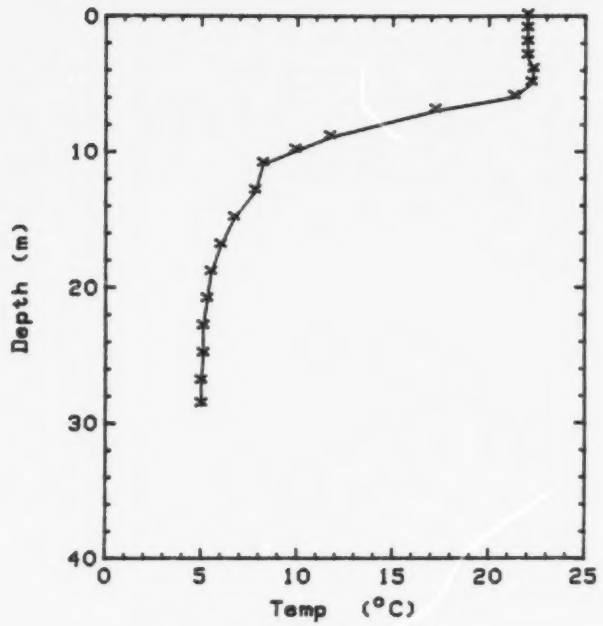
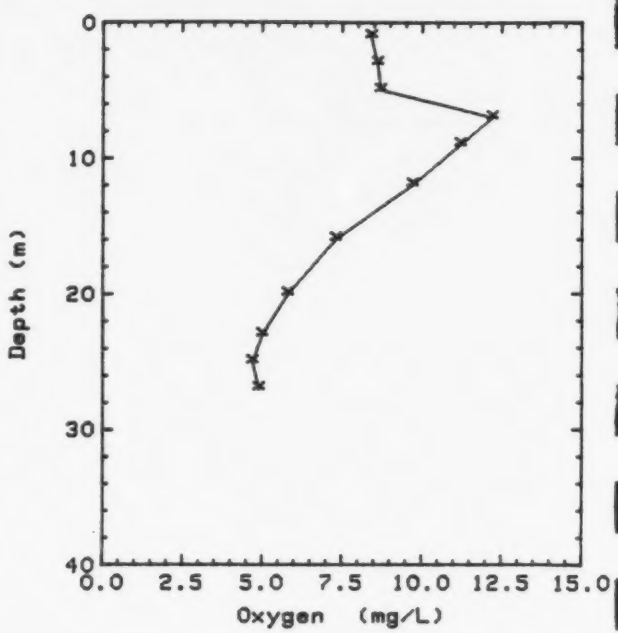



Table 41 con't

# BIG PORCUPINE LAKE 83.08.10



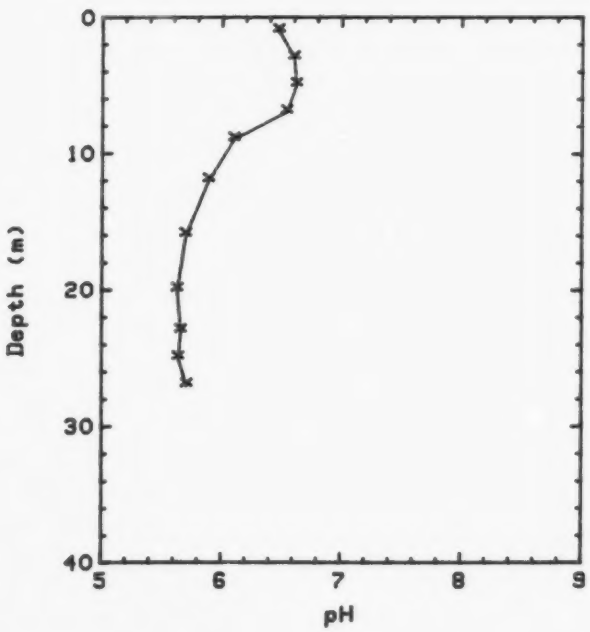
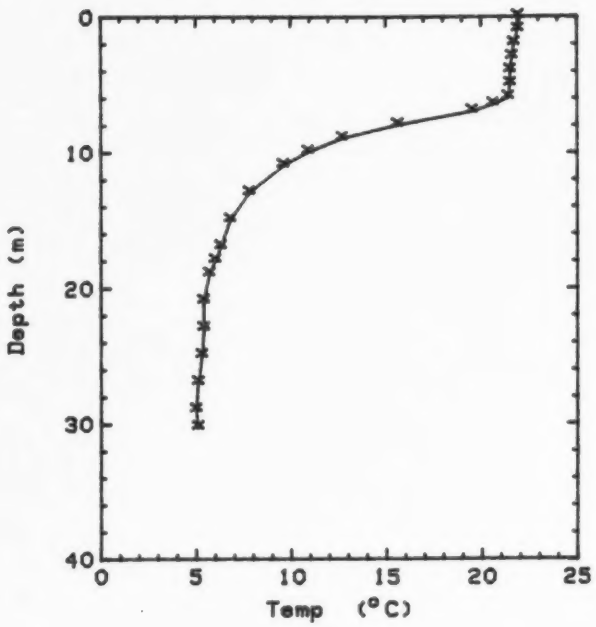
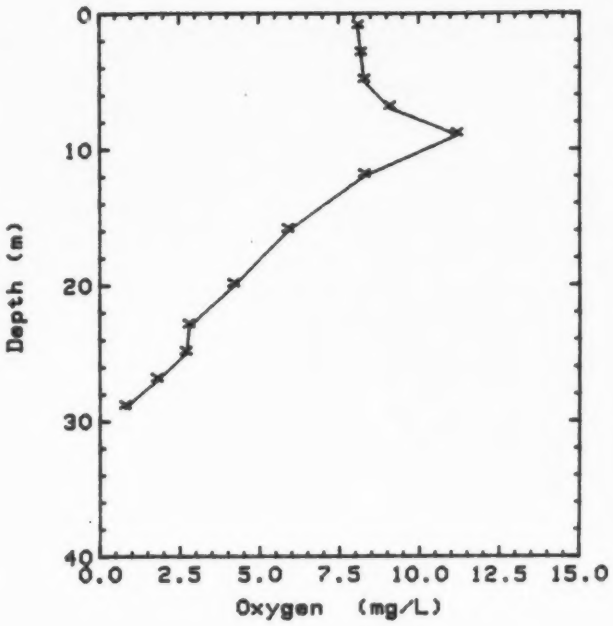



Table 41 con't

# BIG PORCUPINE LAKE 83.09.08



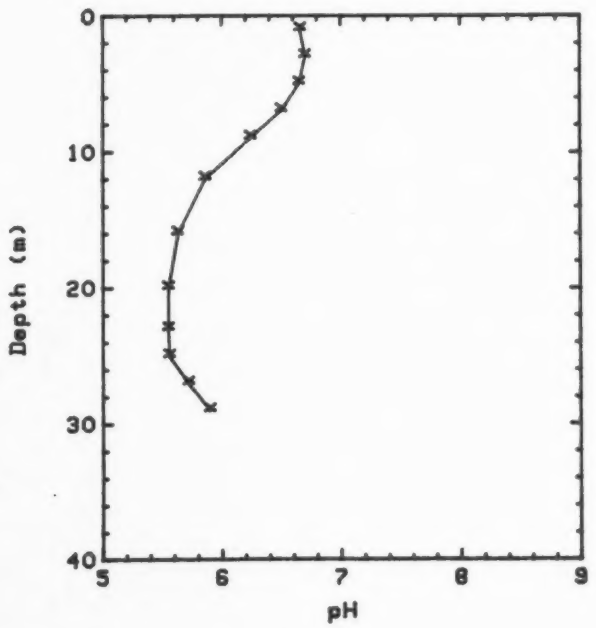
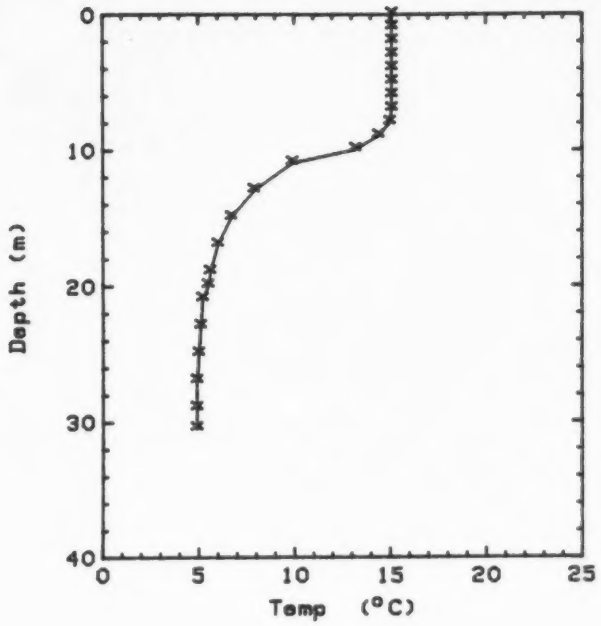
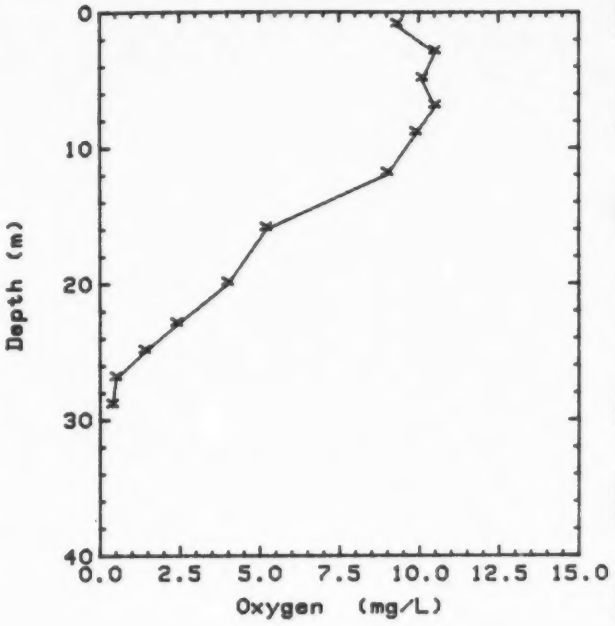



Table 41 con't

# BIG PORCUPINE LAKE 83.10.06



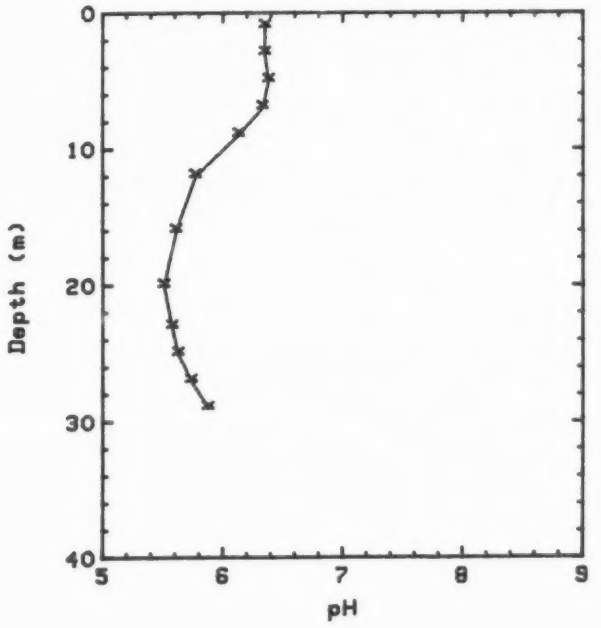
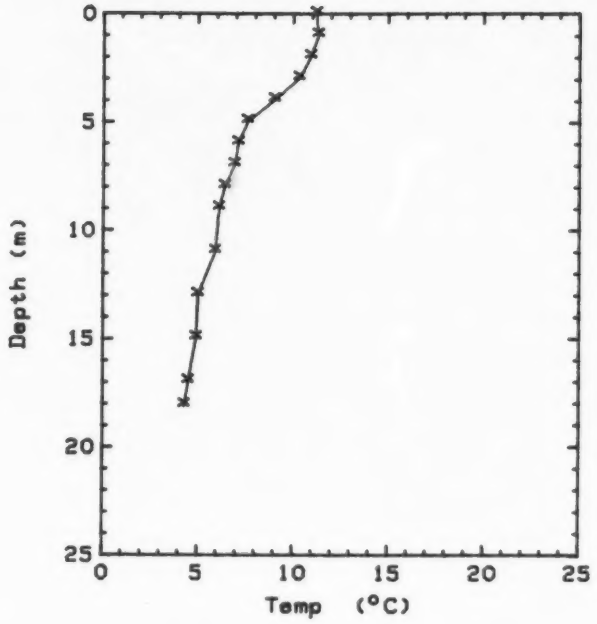
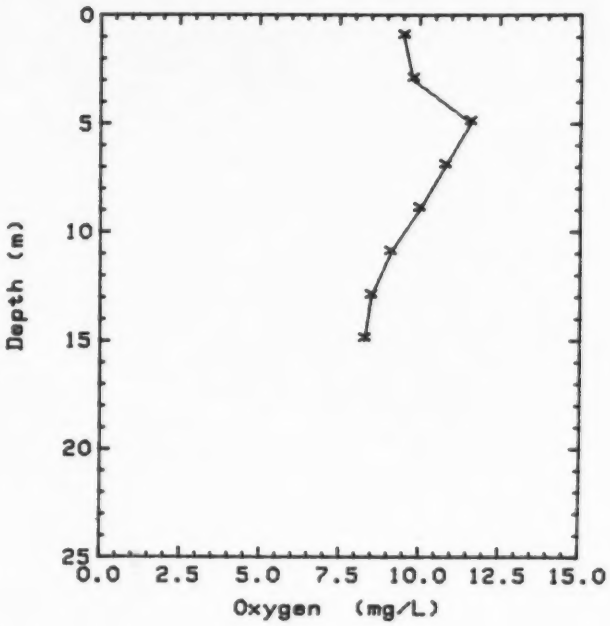



Table 42 Bonnechere Lake

# BONNECHERE LAKE 83.05.17



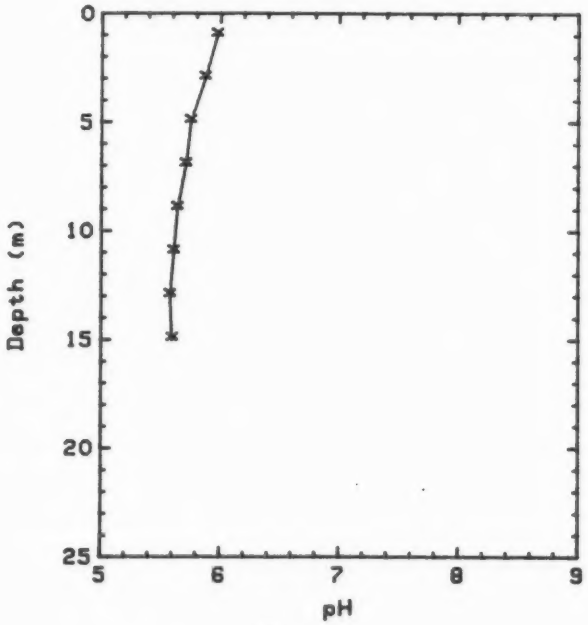
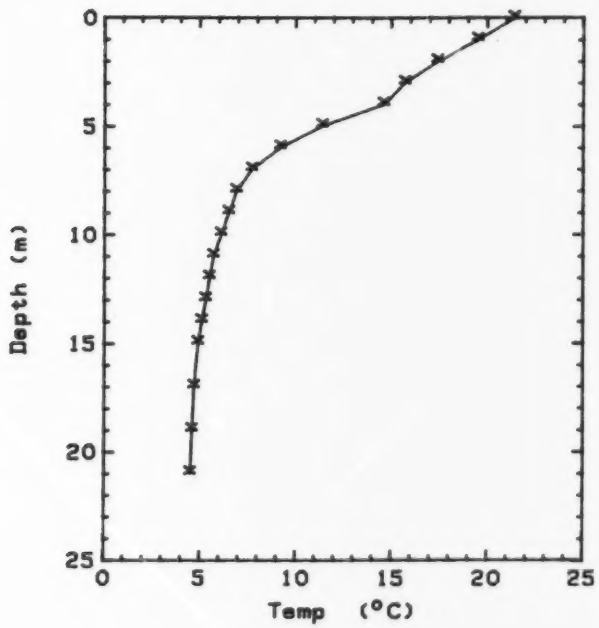
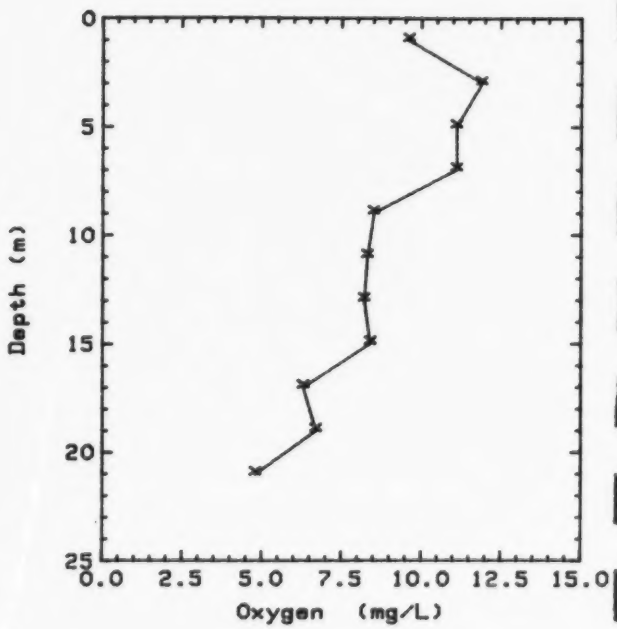



Table 42 con't

# BONNECHERE LAKE 83.06.14



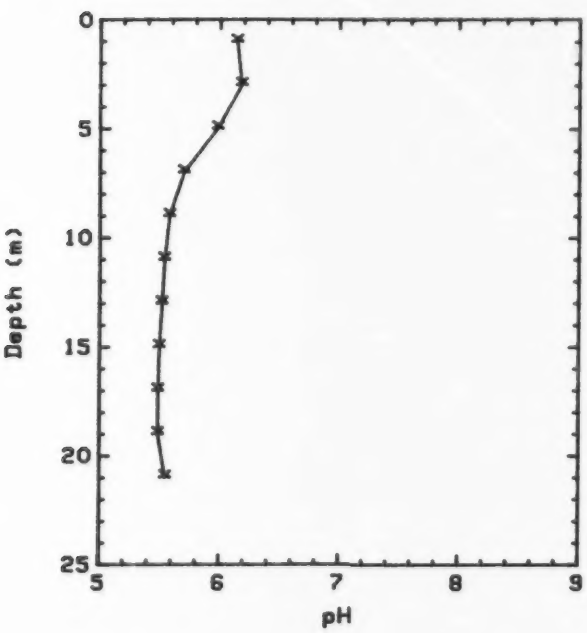
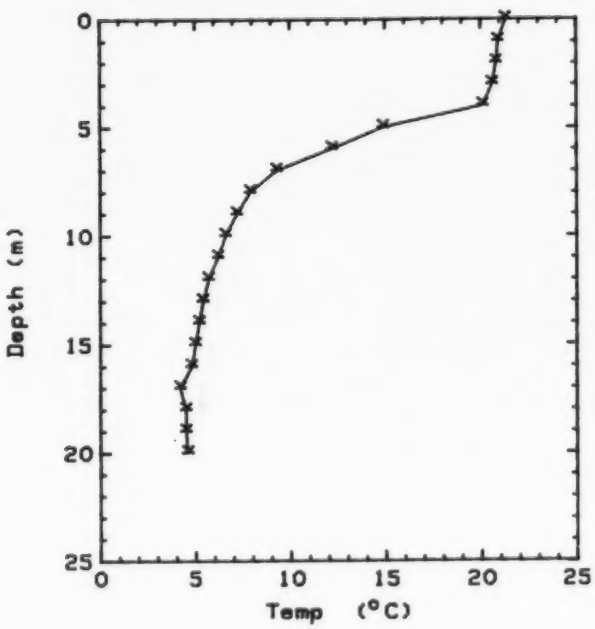
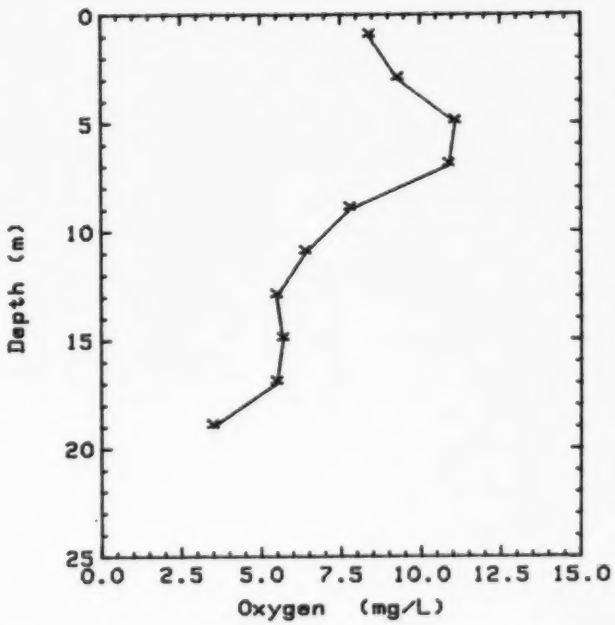



Table 42 con't

# BONNECHERE LAKE 83.07.12



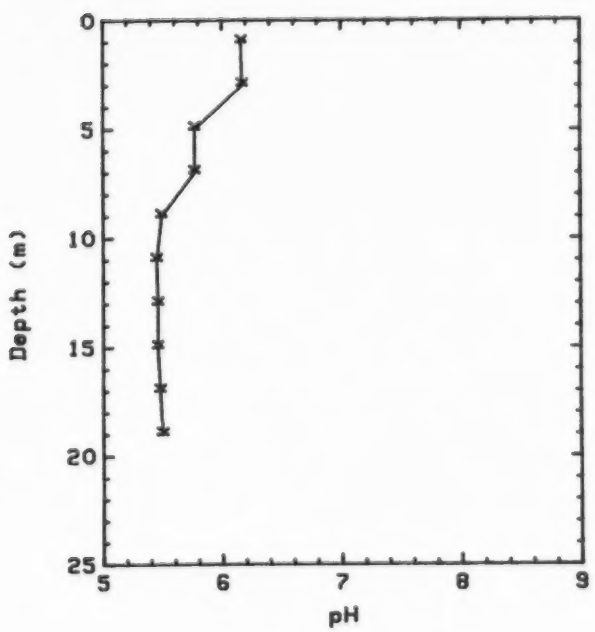
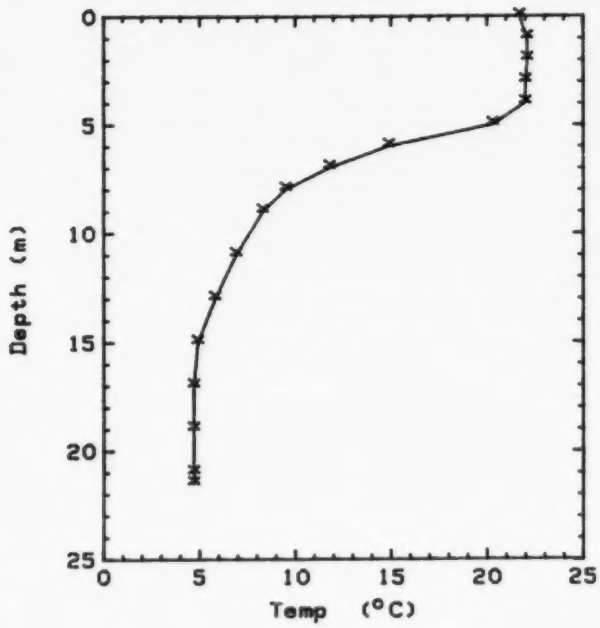
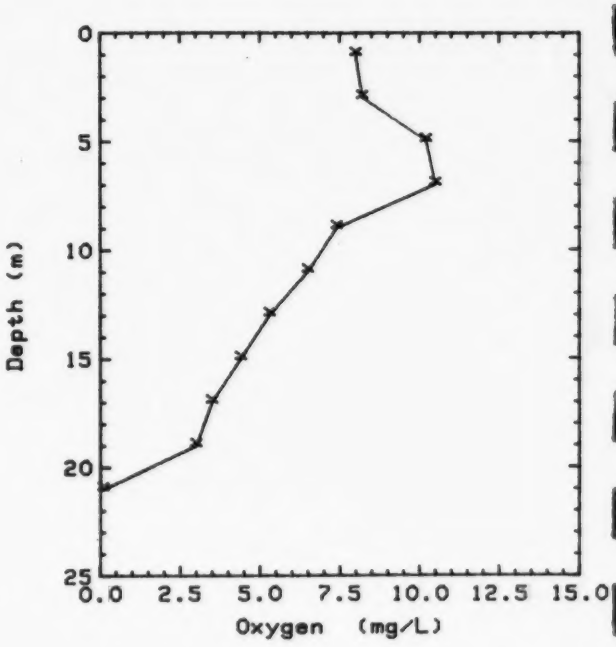



Table 42 con't

# BONNECHERE LAKE 83.08.10



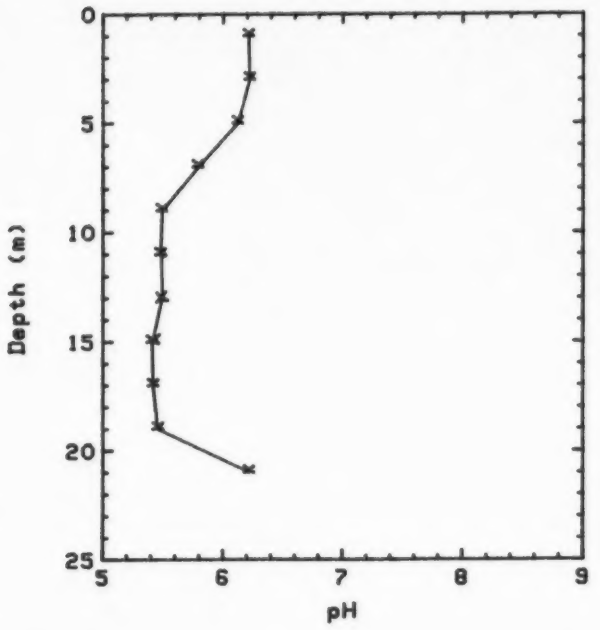
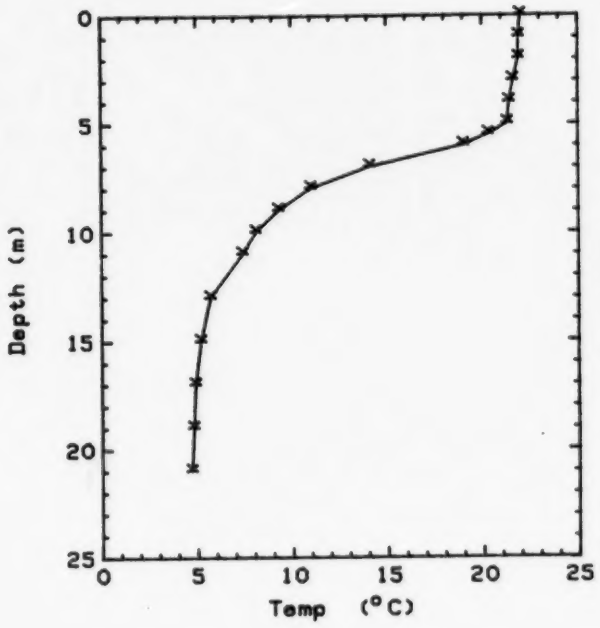
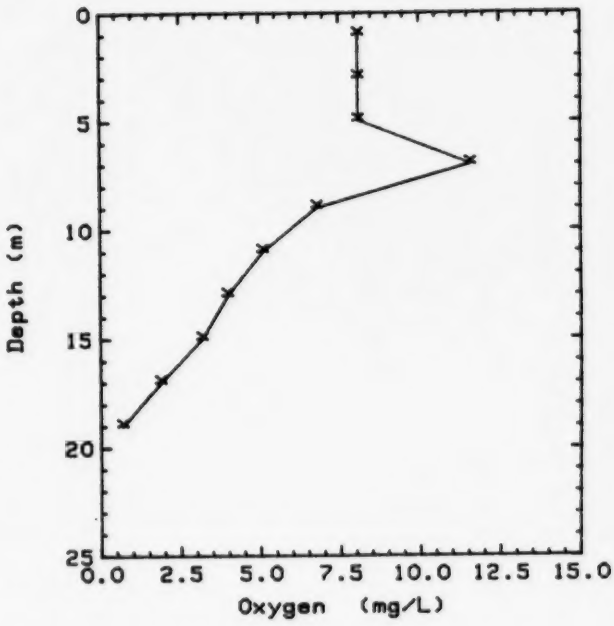



Table 42 con't

# BONNECHERE LAKE 83.09.08



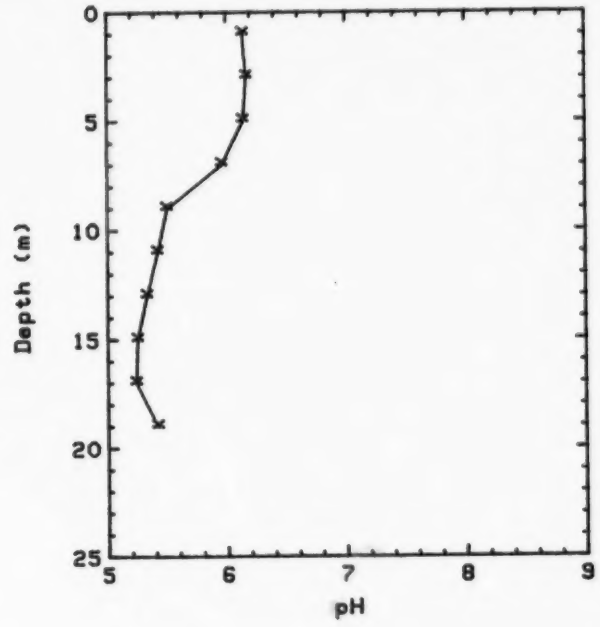
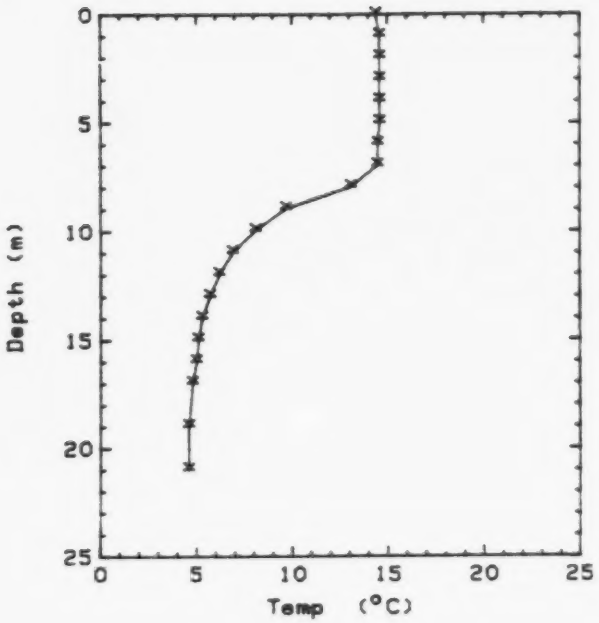
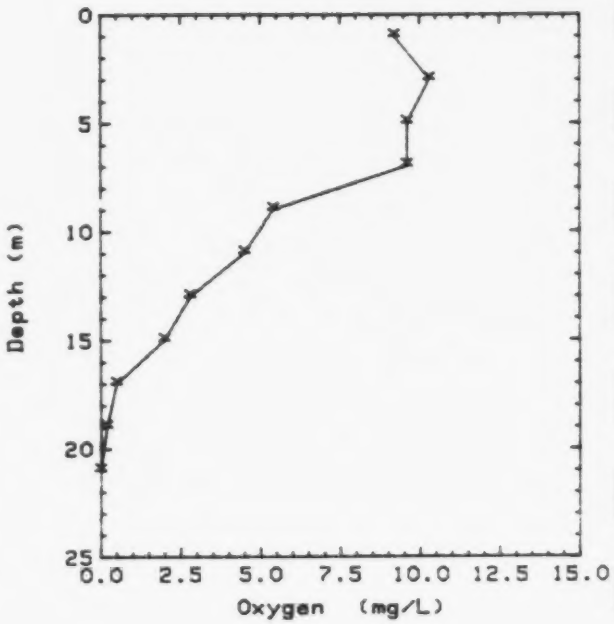



Table 42 con't

# BONNECHERE LAKE 83.10.06



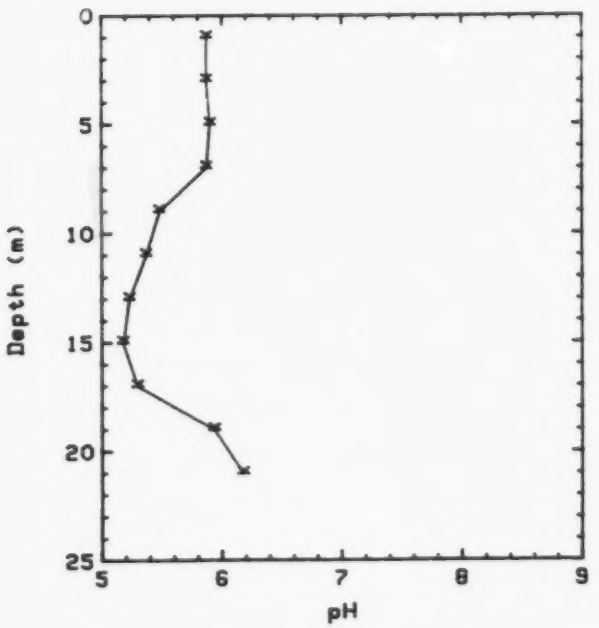
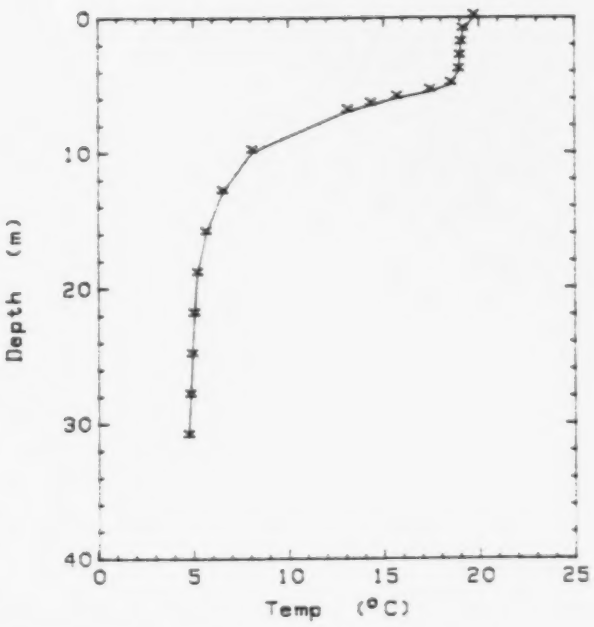
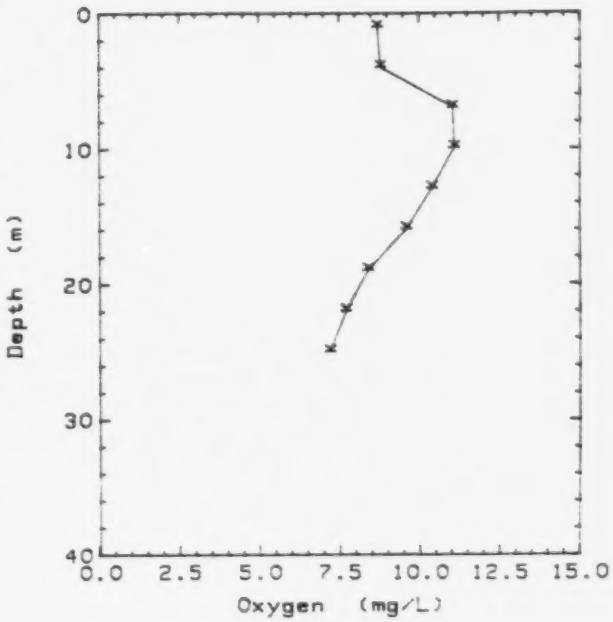



Table 43 Clear Lake

CLEAR LAKE 79.06.19



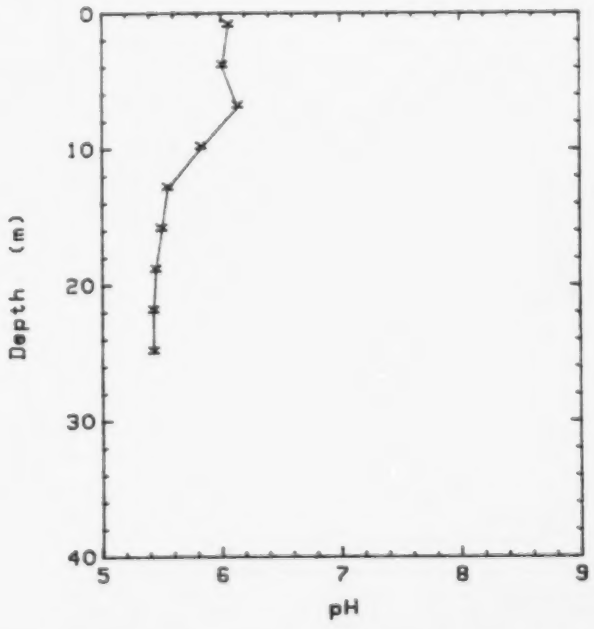
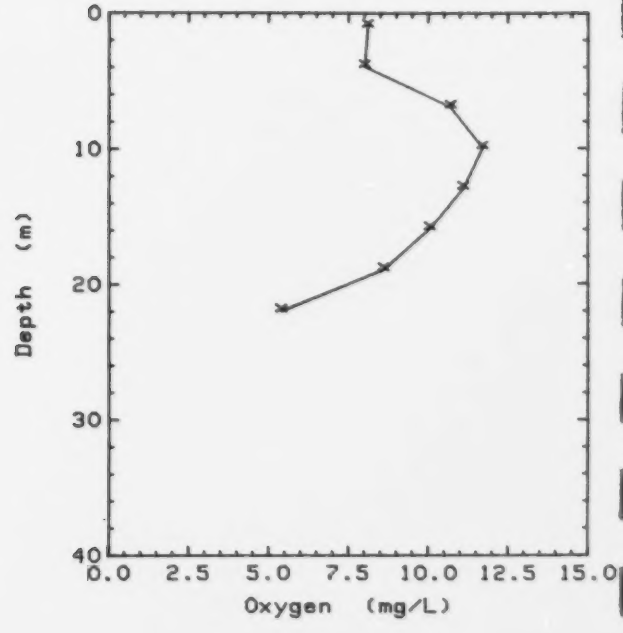



Table 43 con't

# CLEAR LAKE 79.08.07



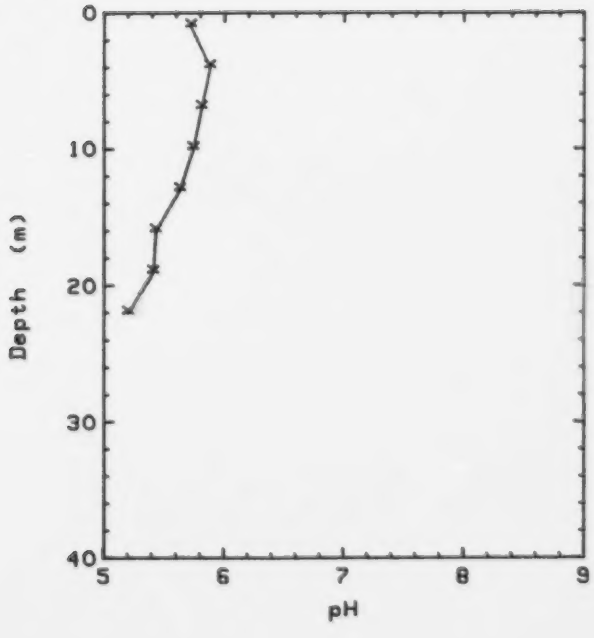
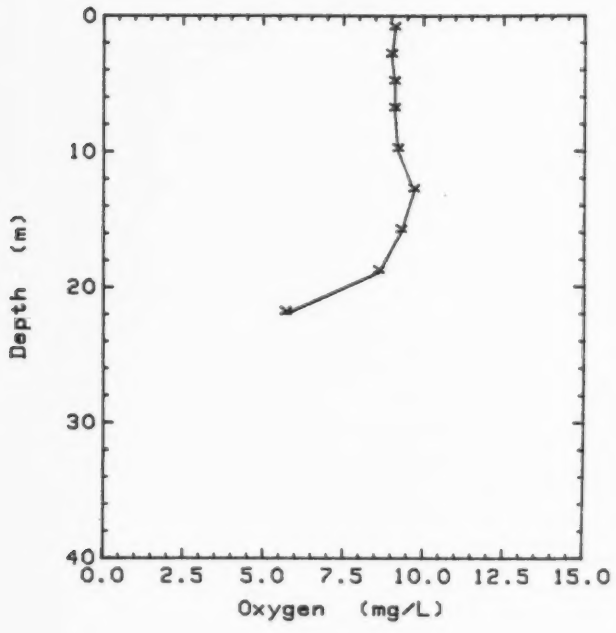



Table 43 con't

# CLEAR LAKE 79.09.26



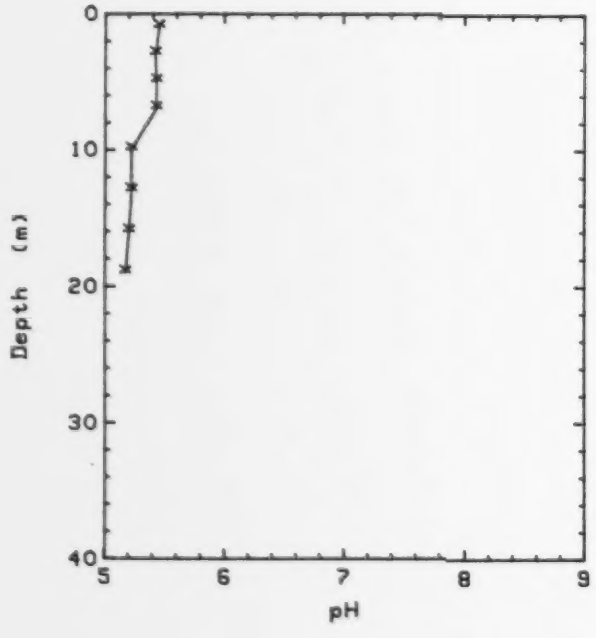
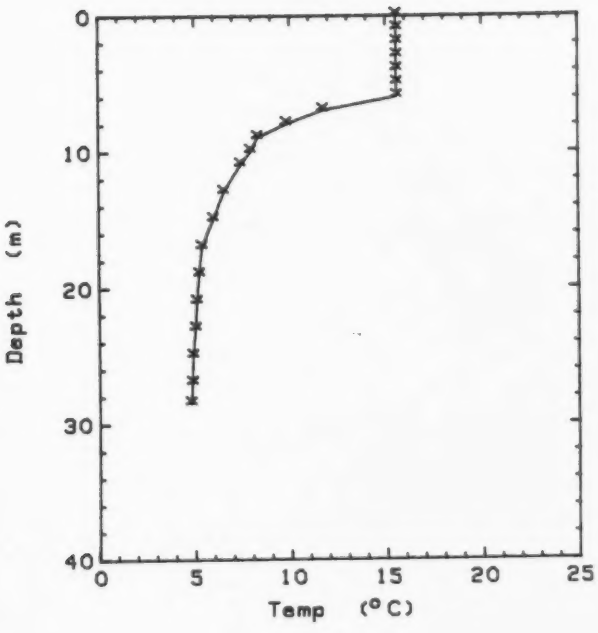
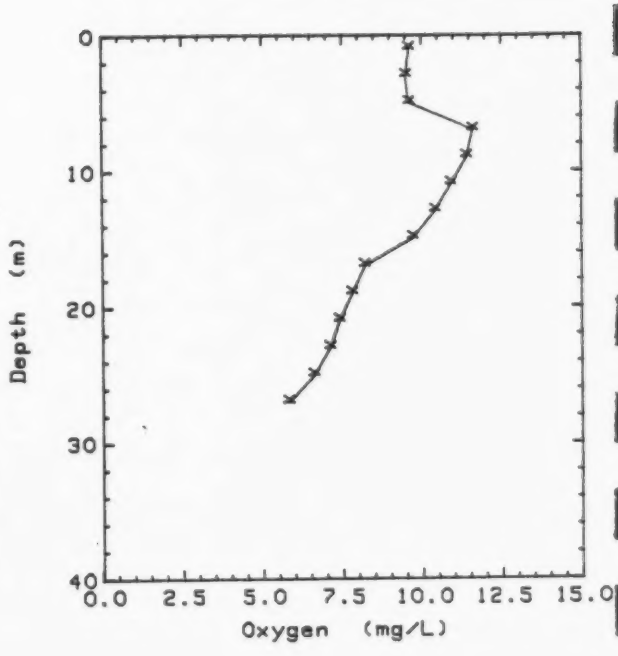
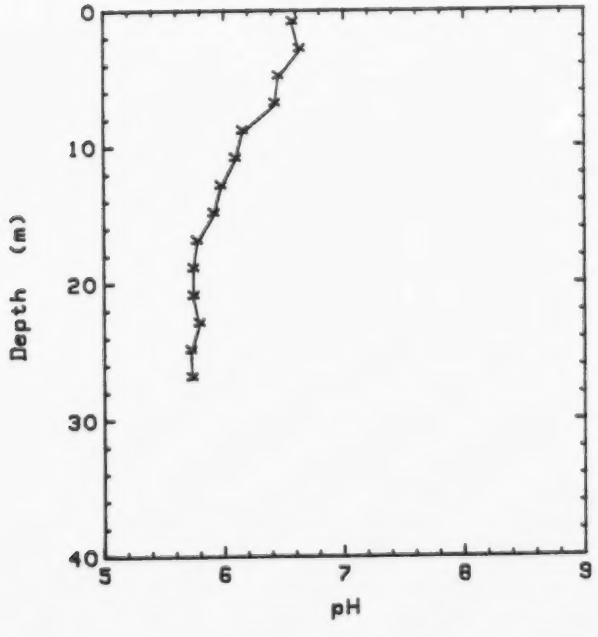



Table 43 con't

# CLEAR LAKE 80.06.09



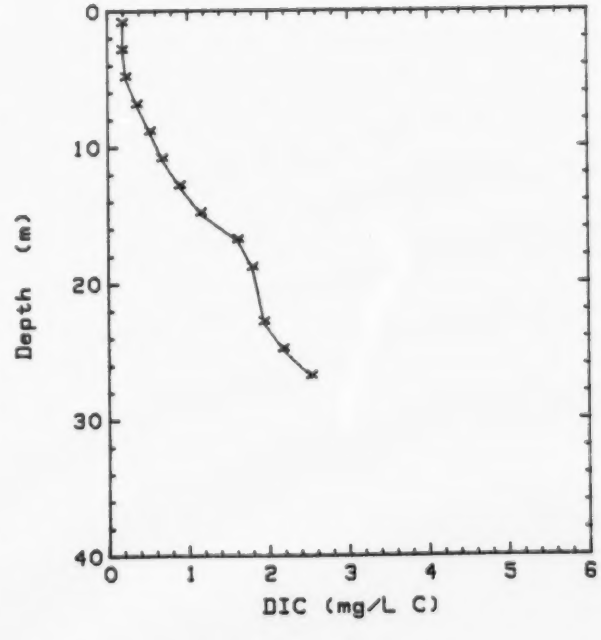
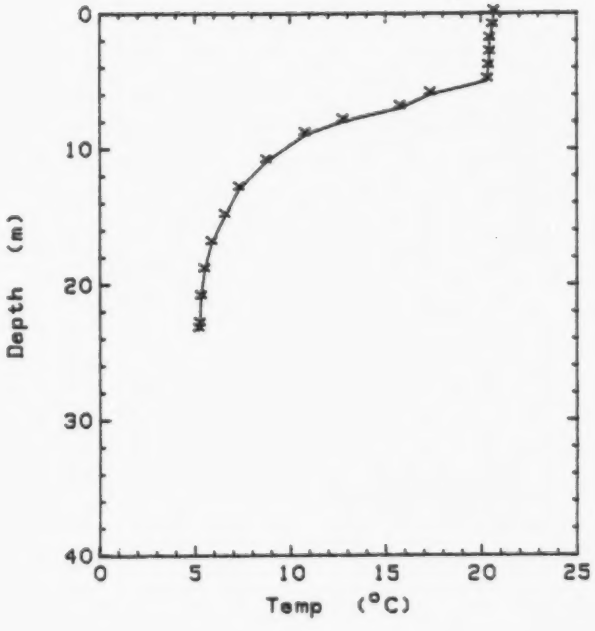
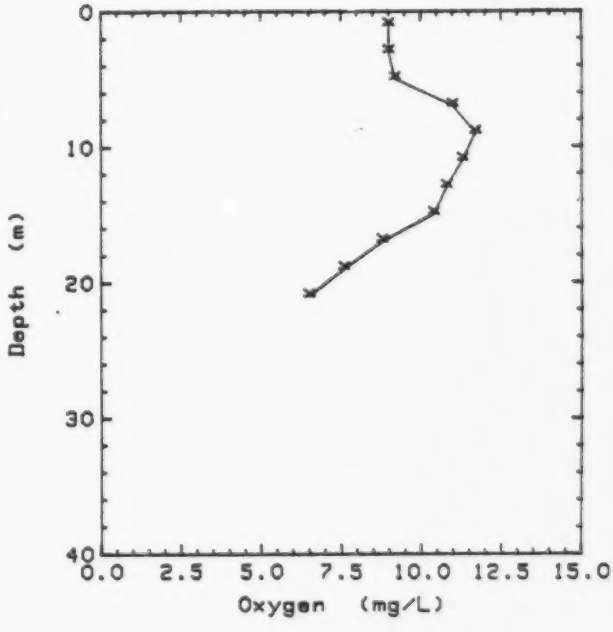



Table 43 con't

# CLEAR LAKE 80.07.02



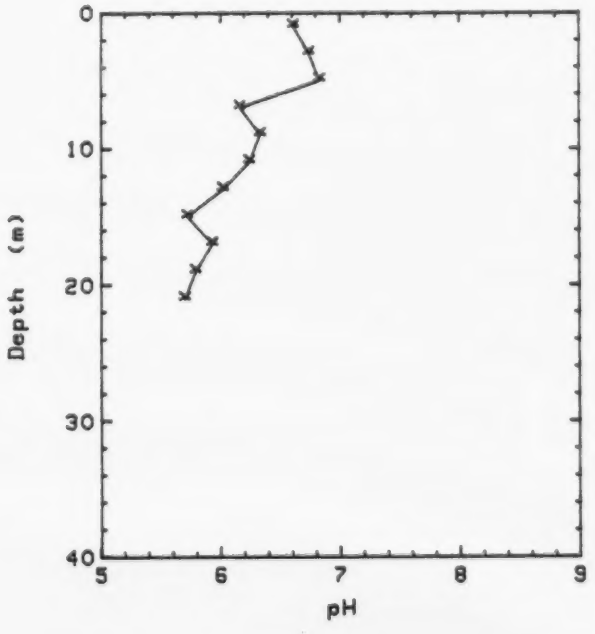
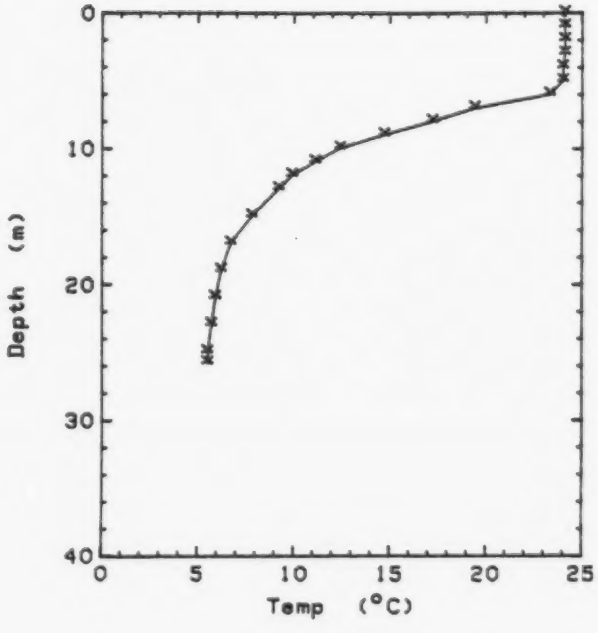
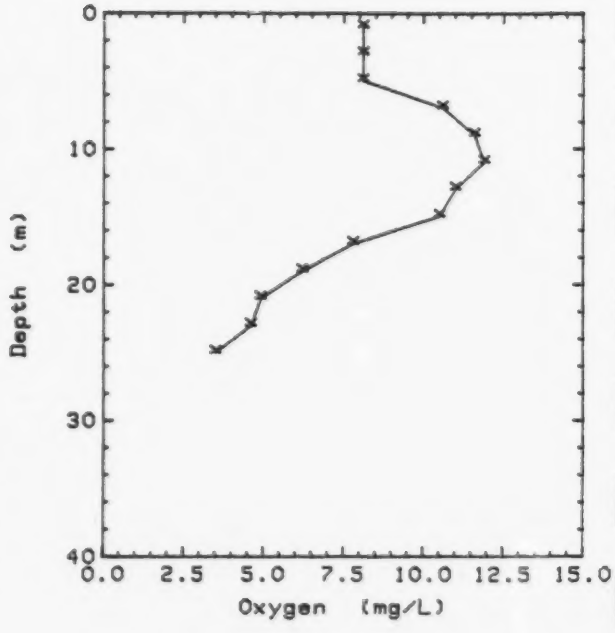



Table 43 con't

CLEAR LAKE 80.08.12



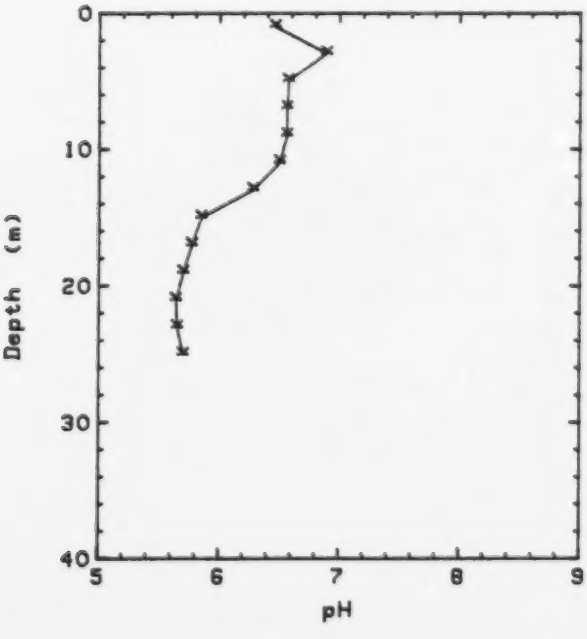
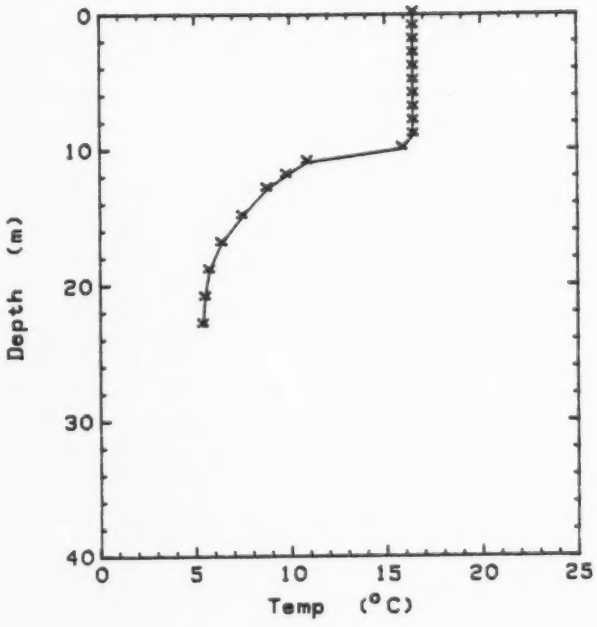
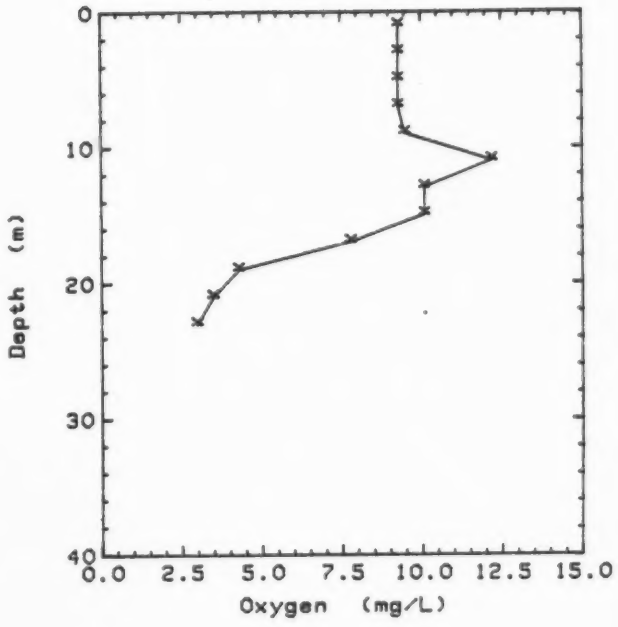



Table 43 con't

# CLEAR LAKE 80.09.25



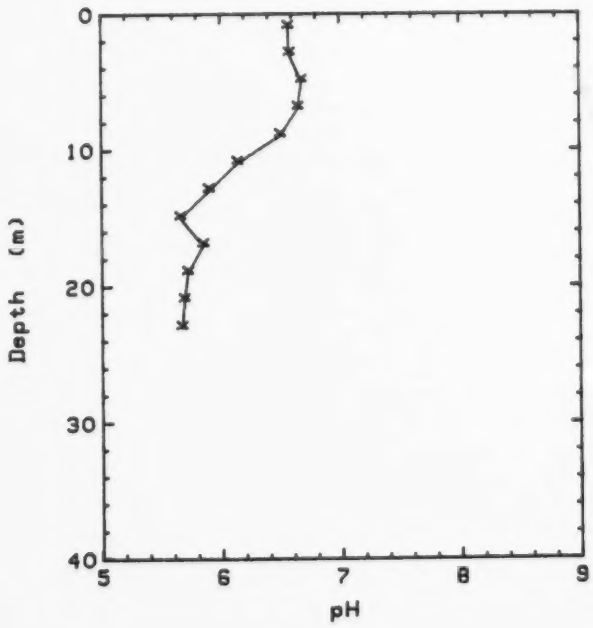
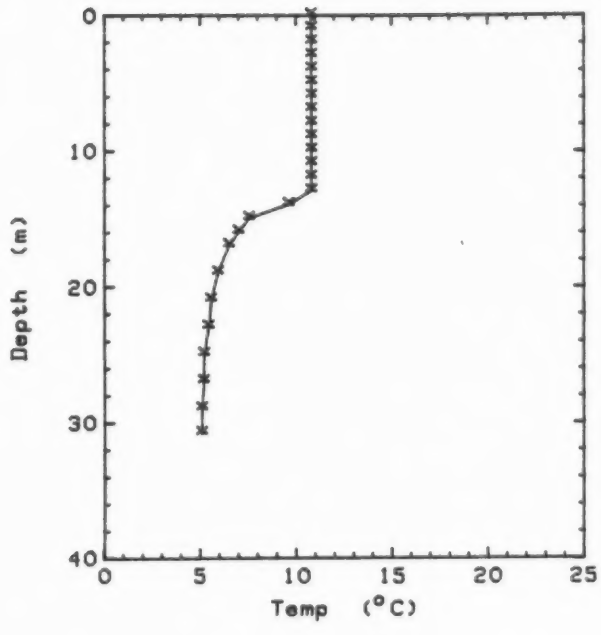
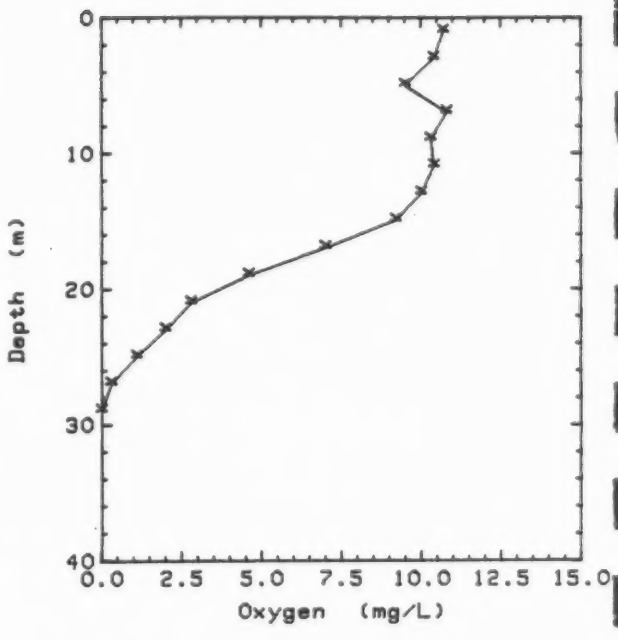



Table 43 con't

# CLEAR LAKE 80.10.21



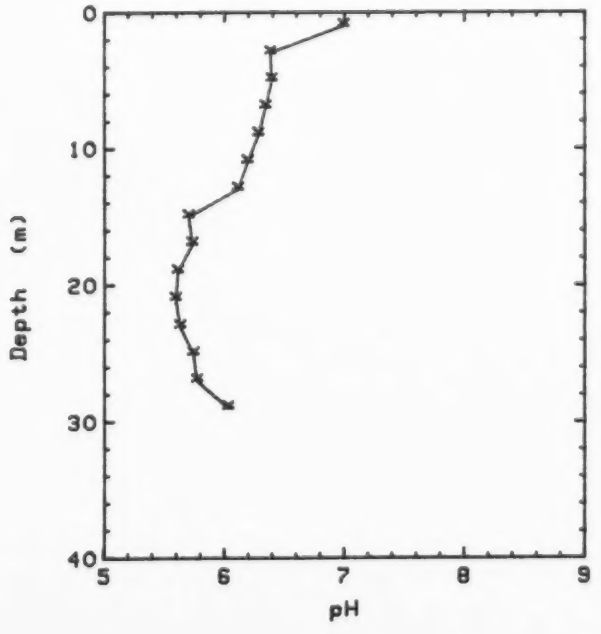
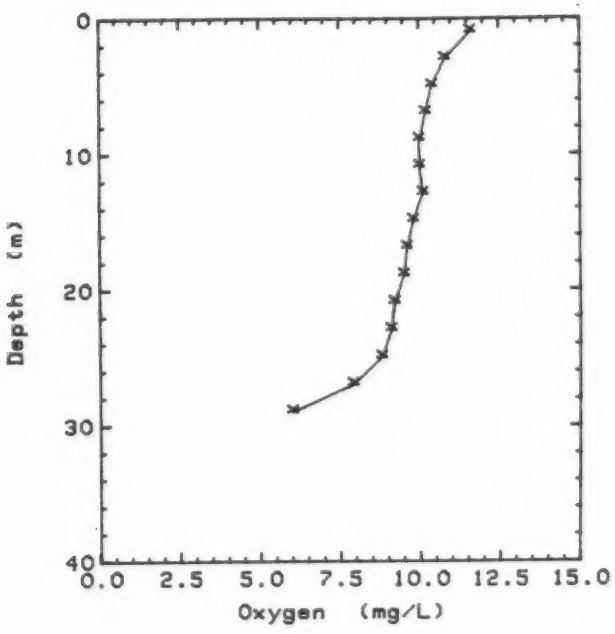



Table 43 con't

CLEAR LAKE 81.01.28



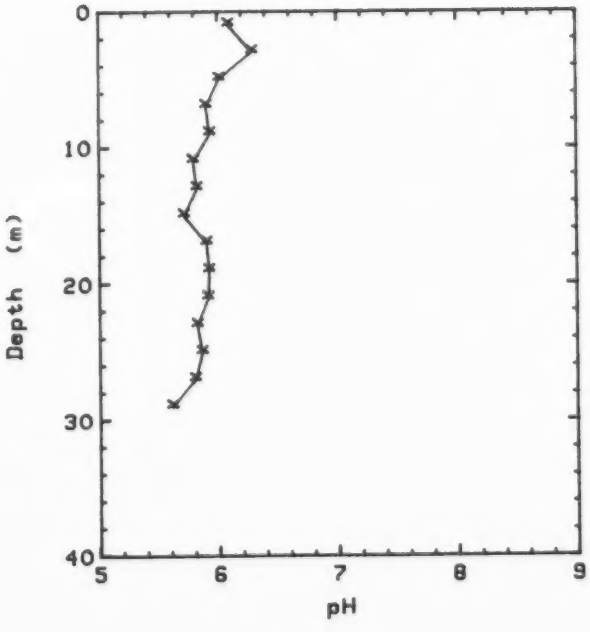
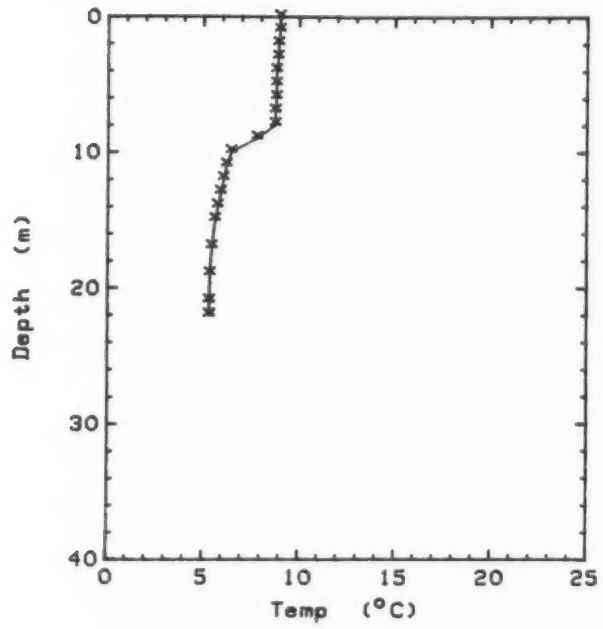
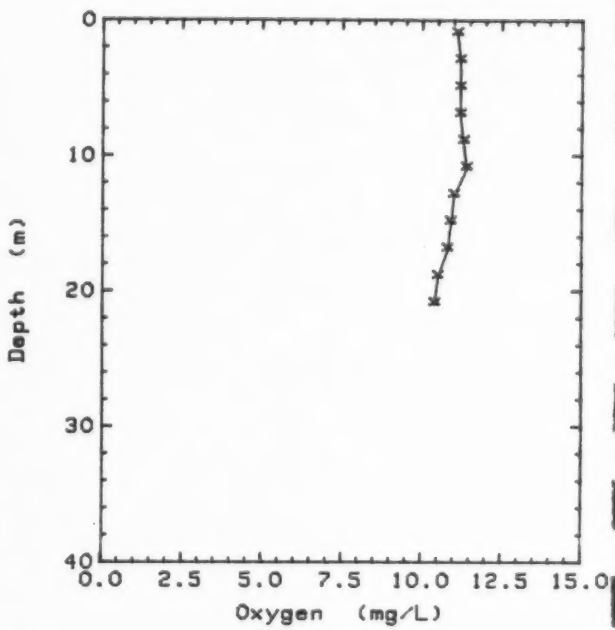
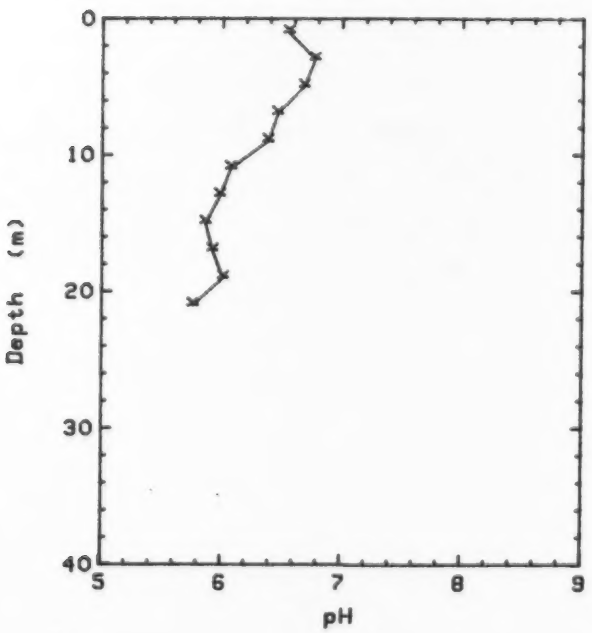



Table 43 con't

# CLEAR LAKE 81.05.14



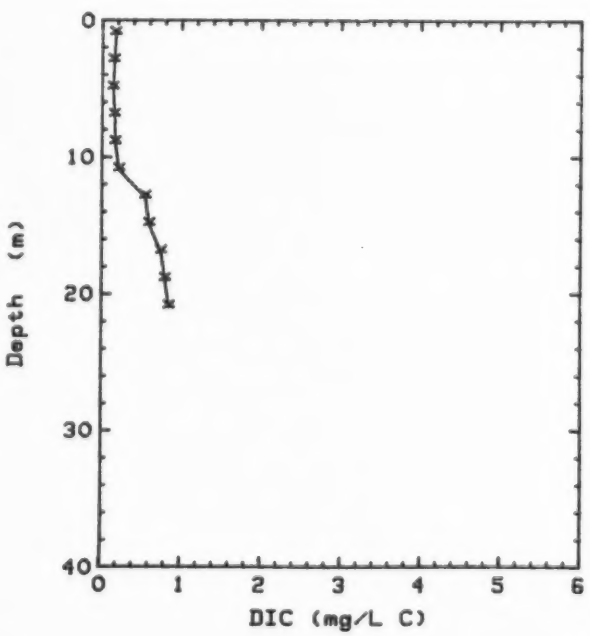
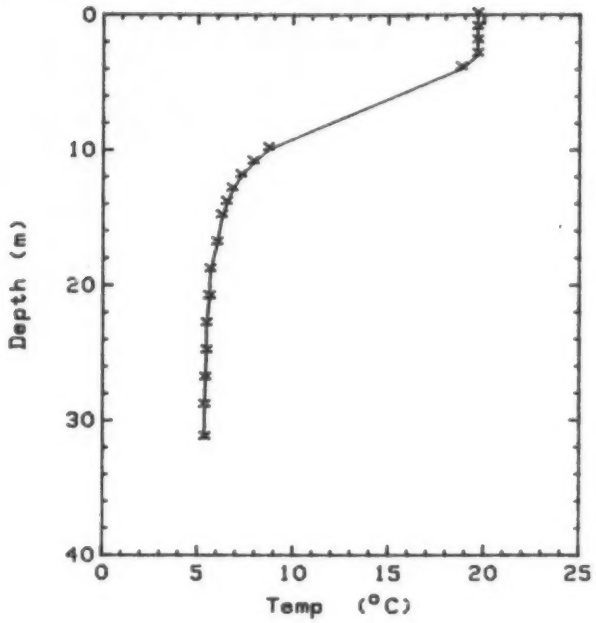
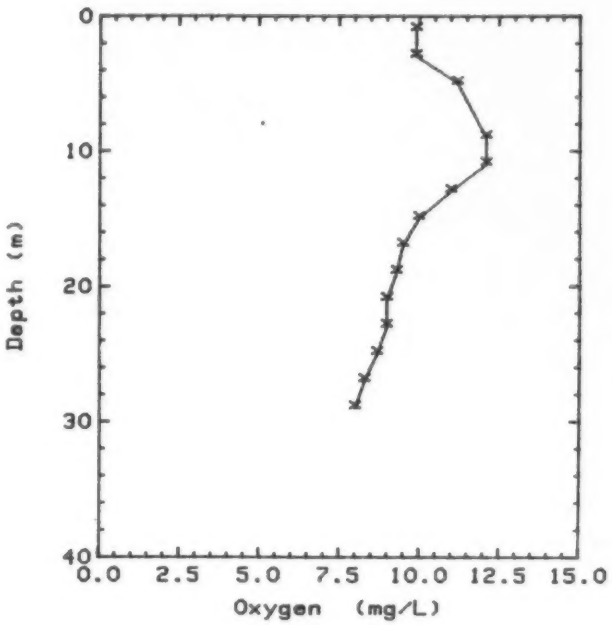
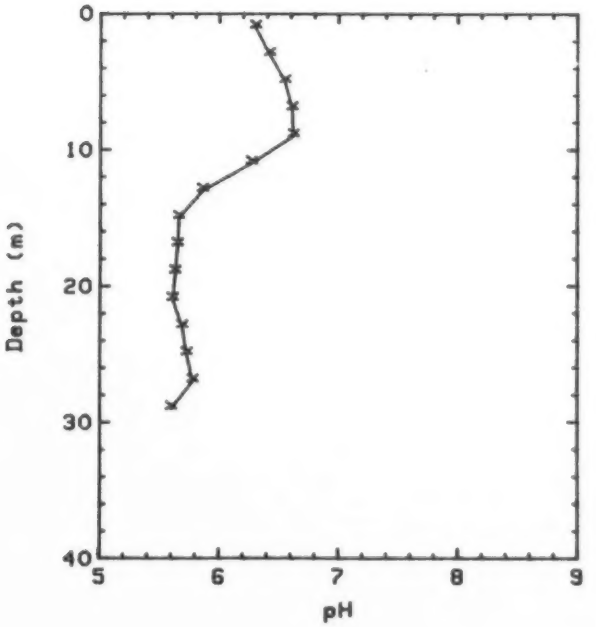



Table 43 con't

# CLEAR LAKE 81.06.17



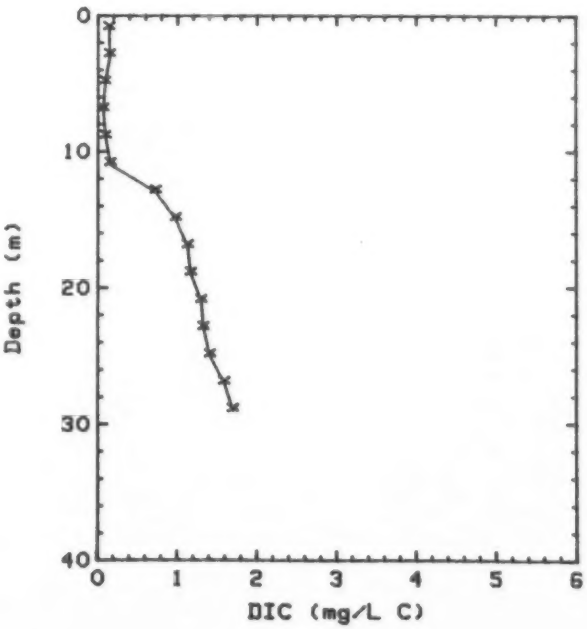
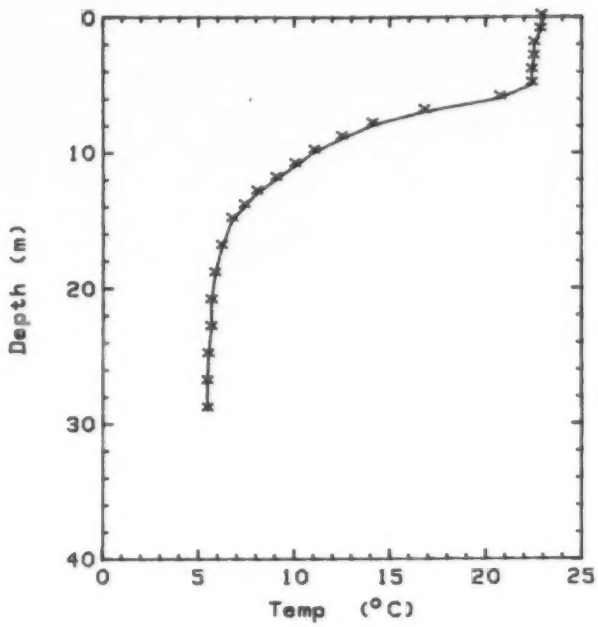
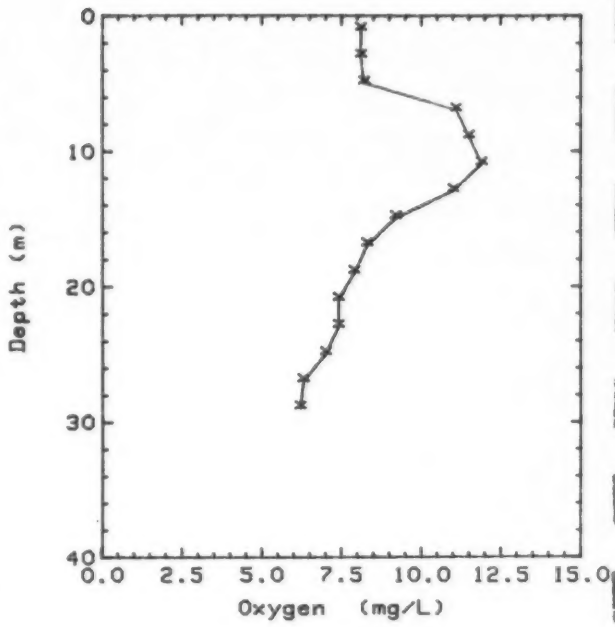
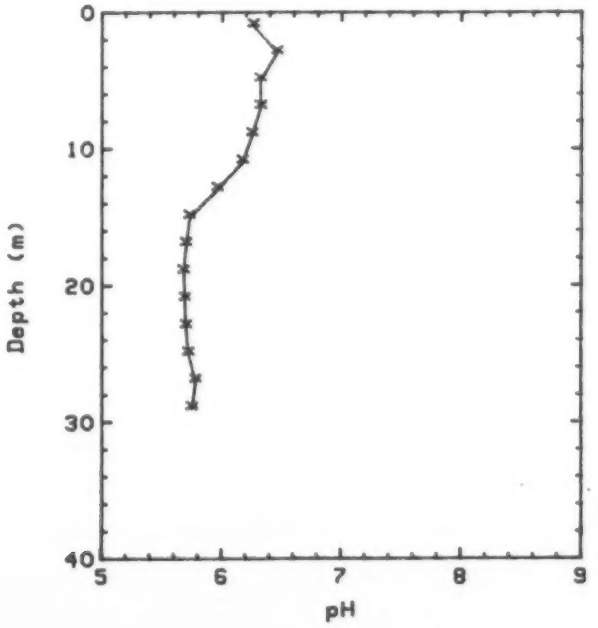



Table 43 con't

# CLEAR LAKE 81.07.23



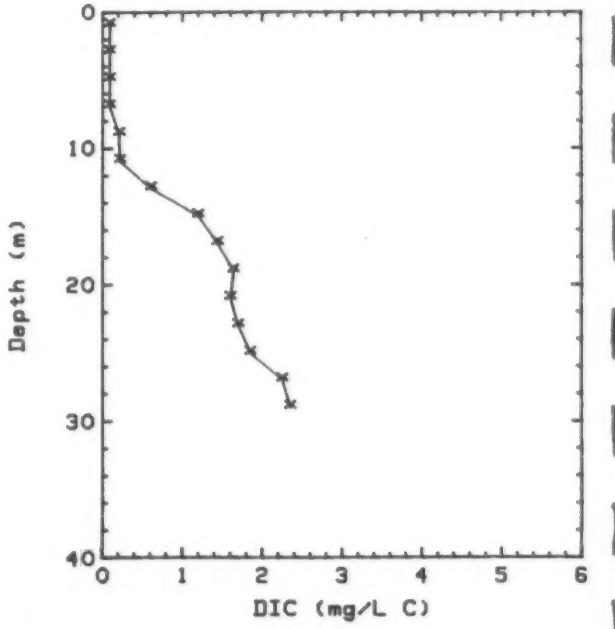
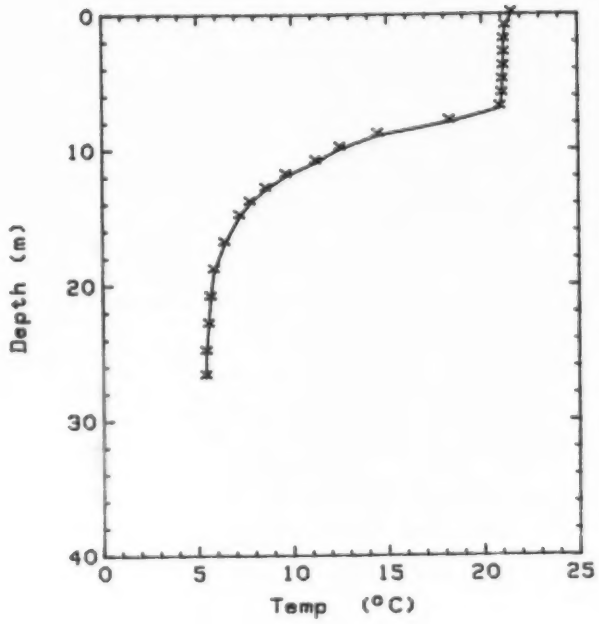
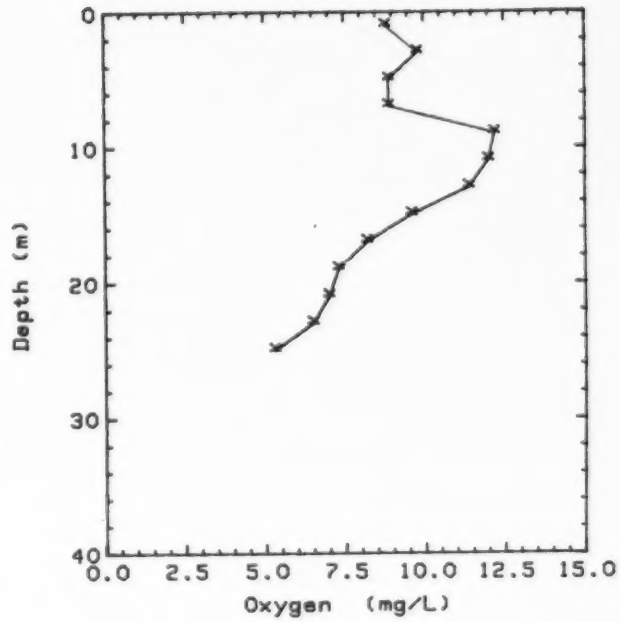
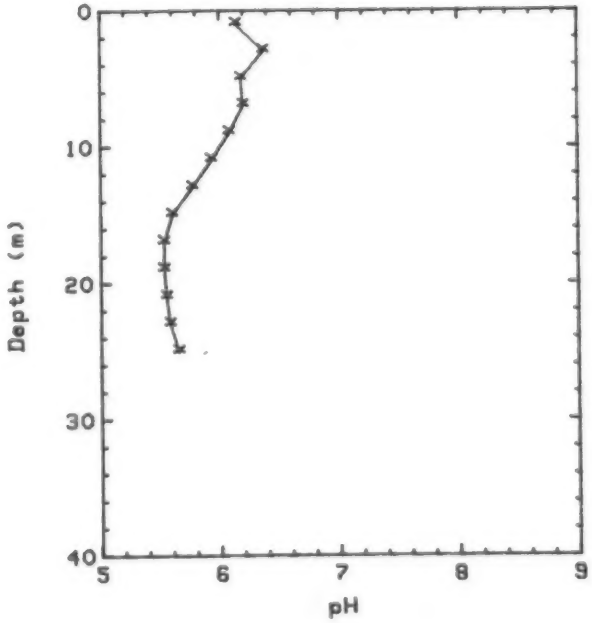



Table 43 con't

# CLEAR LAKE 81.08.26



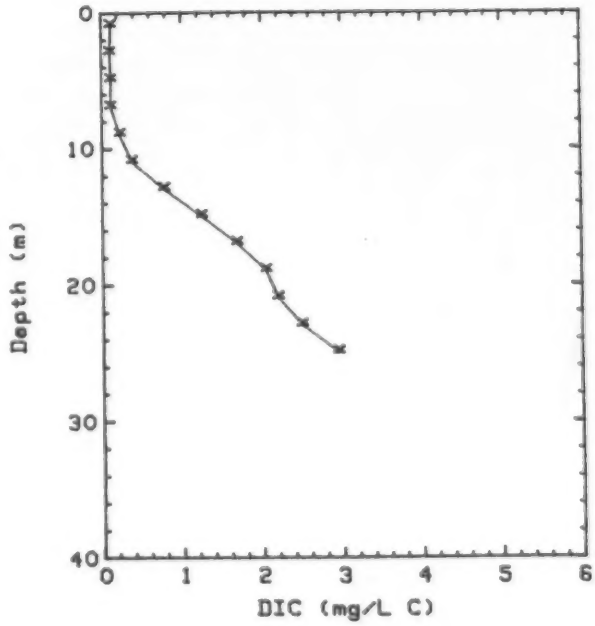
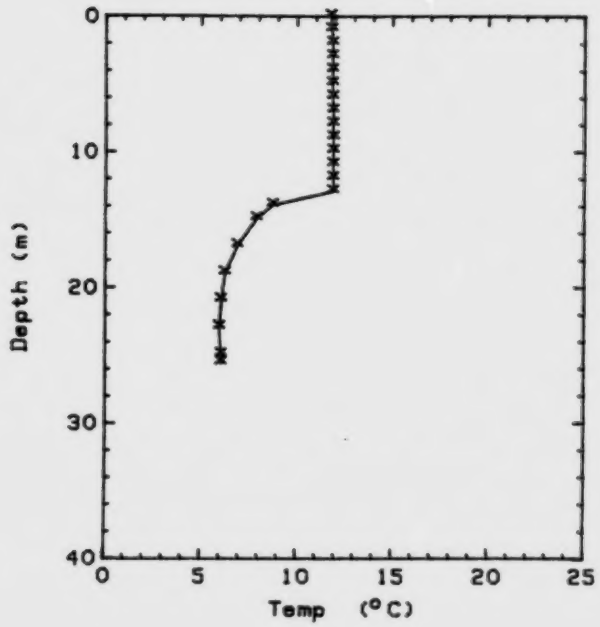
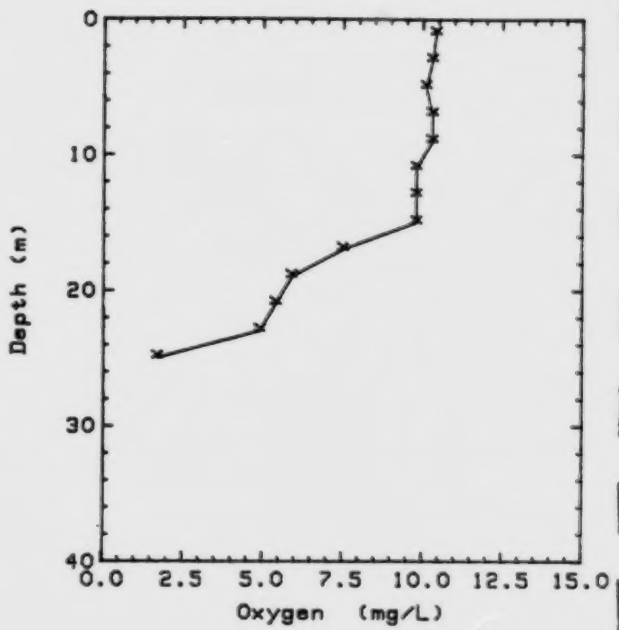
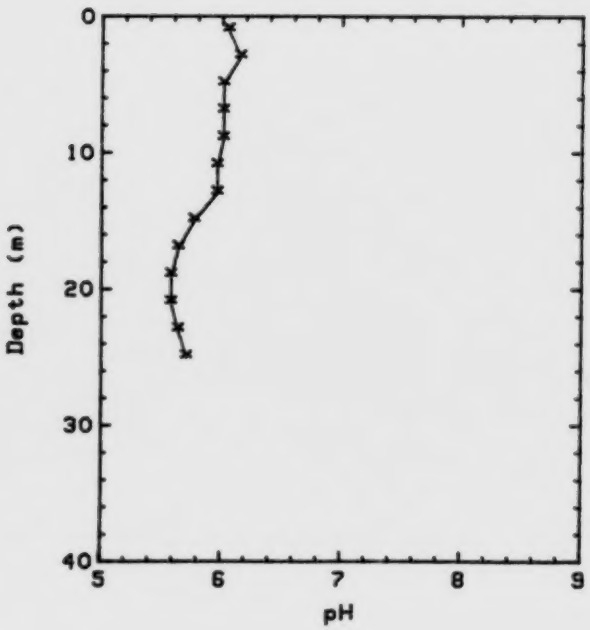



Table 43 con't

# CLEAR LAKE 81.10.07



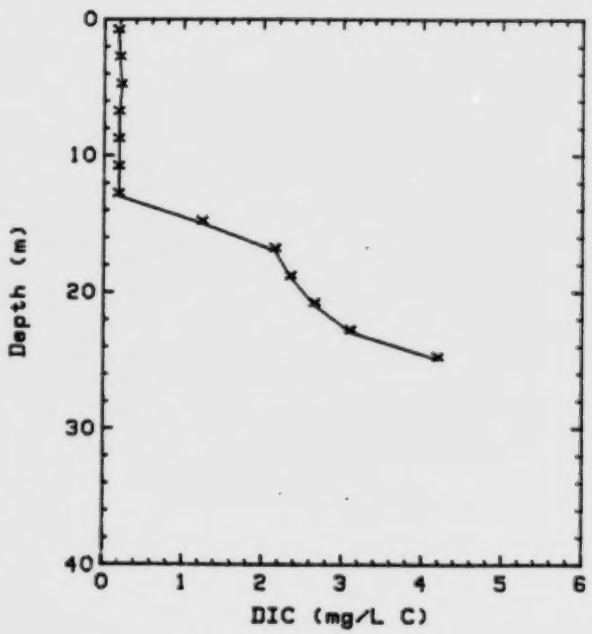
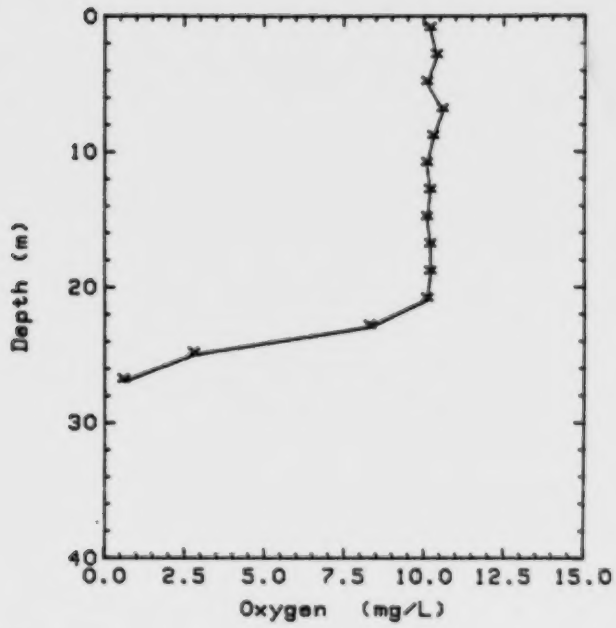



Table 43 con't

# CLEAR LAKE 81.11.17



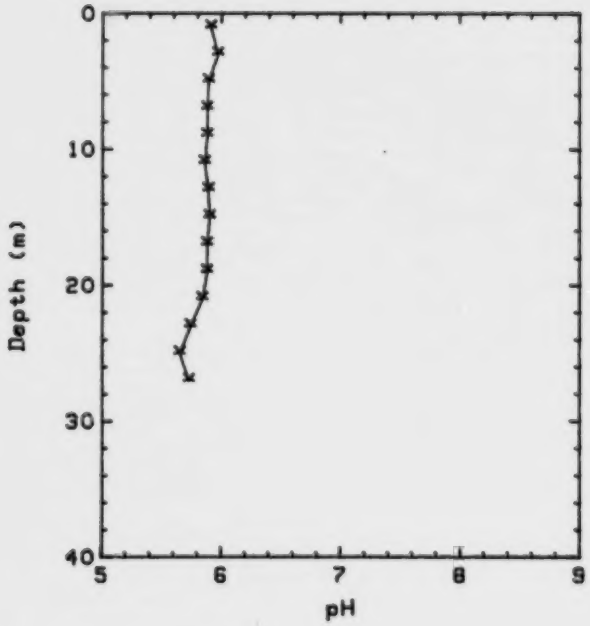
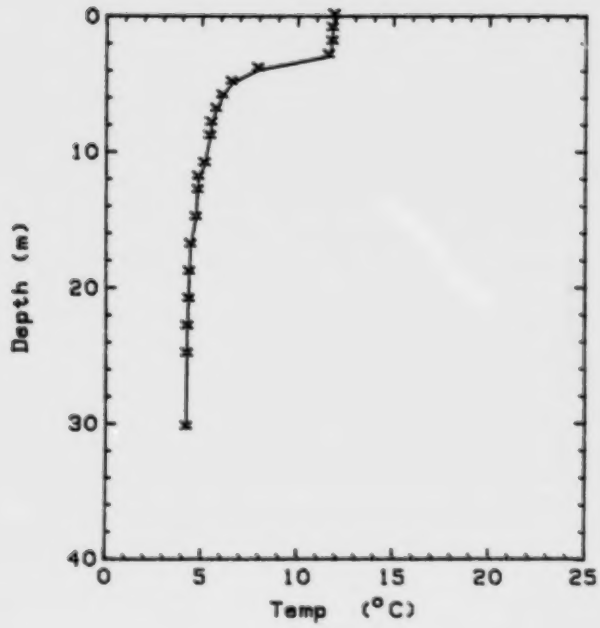
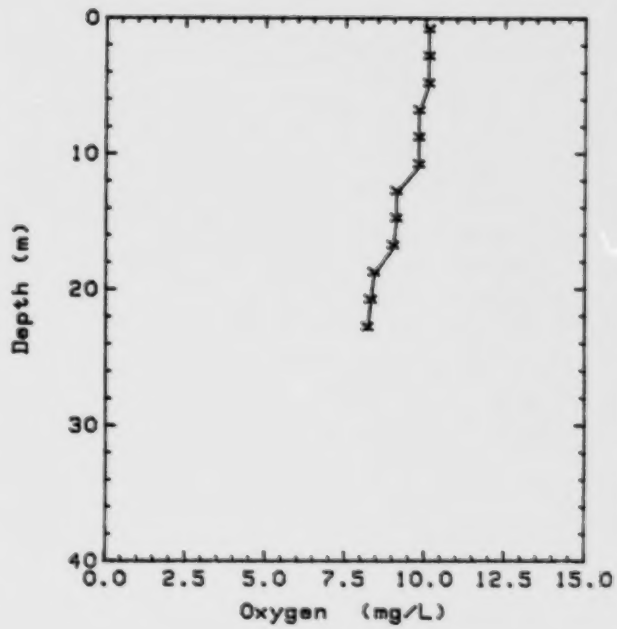
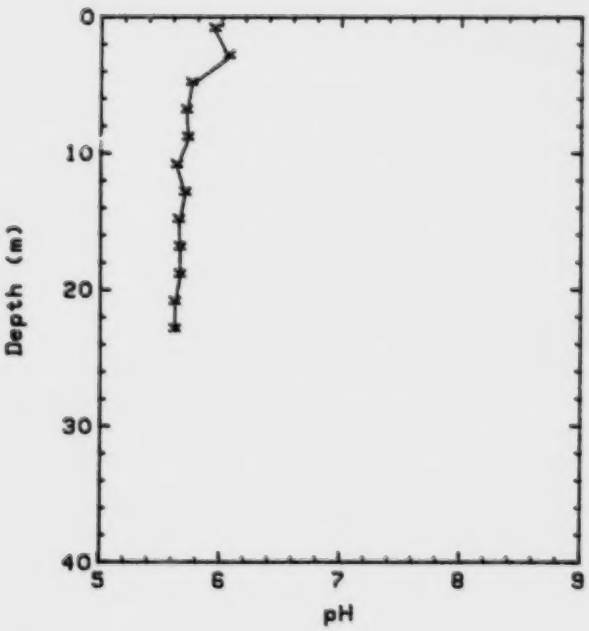



Table 43 con't

# CLEAR LAKE 82.05.11



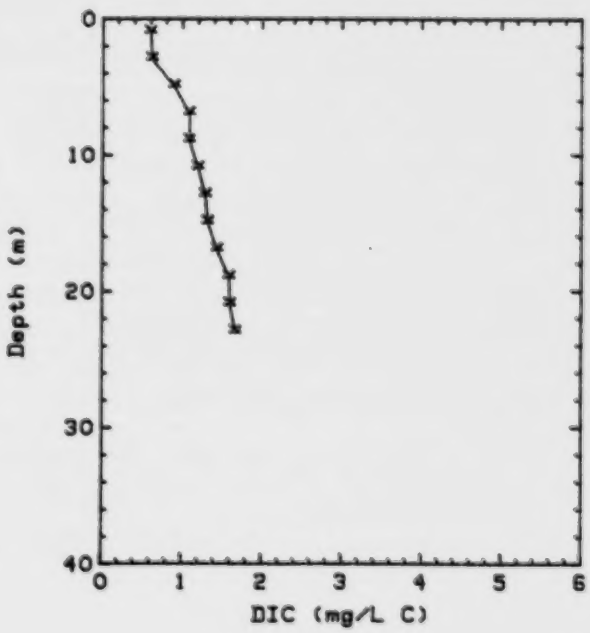
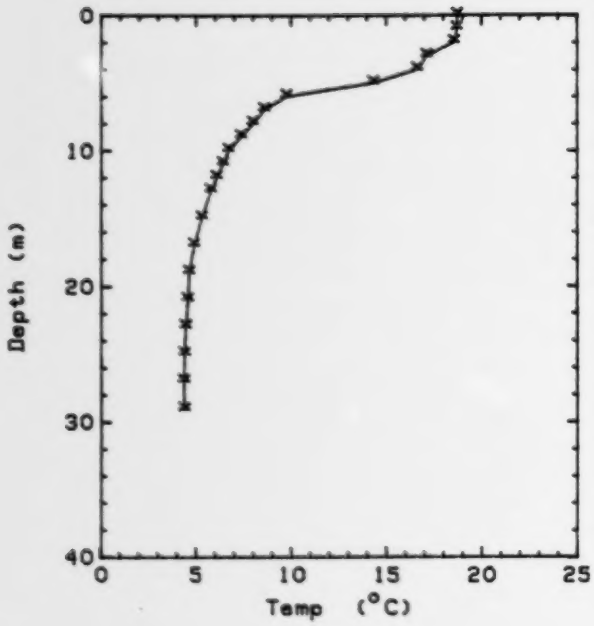
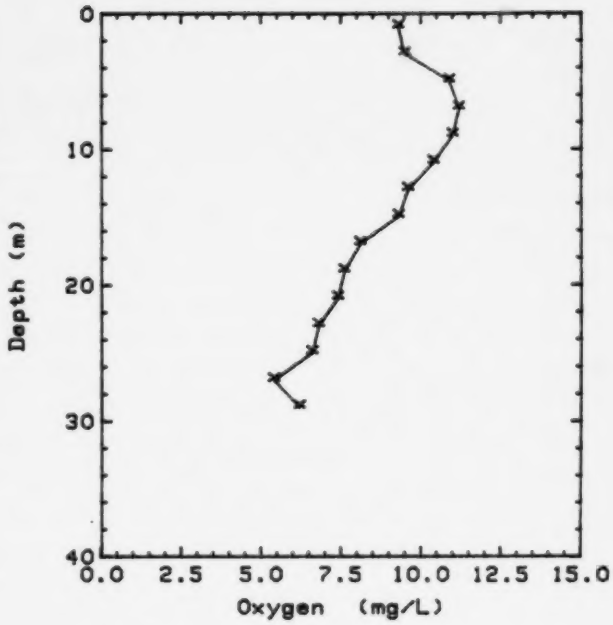
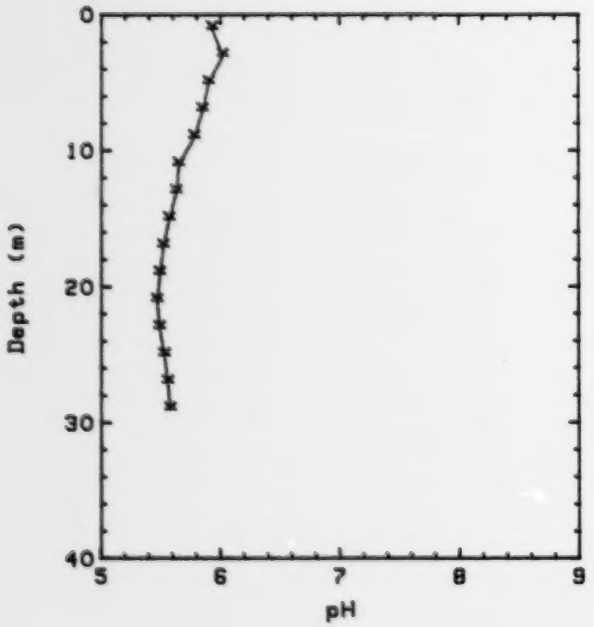



Table 43 con't

# CLEAR LAKE 82.06.09



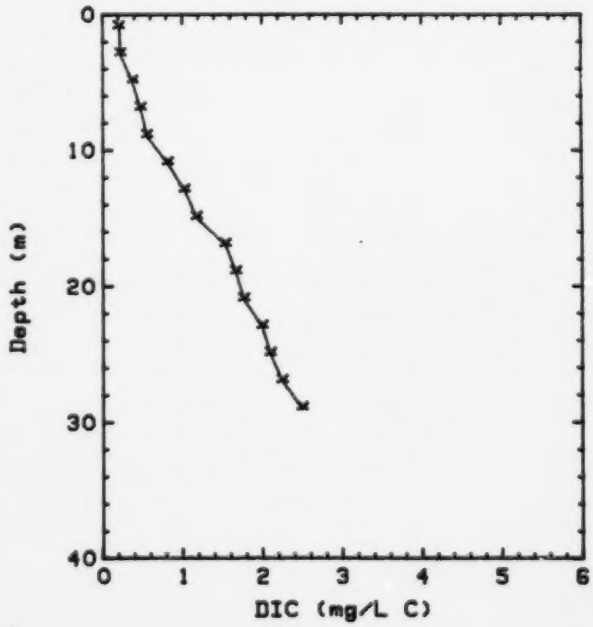
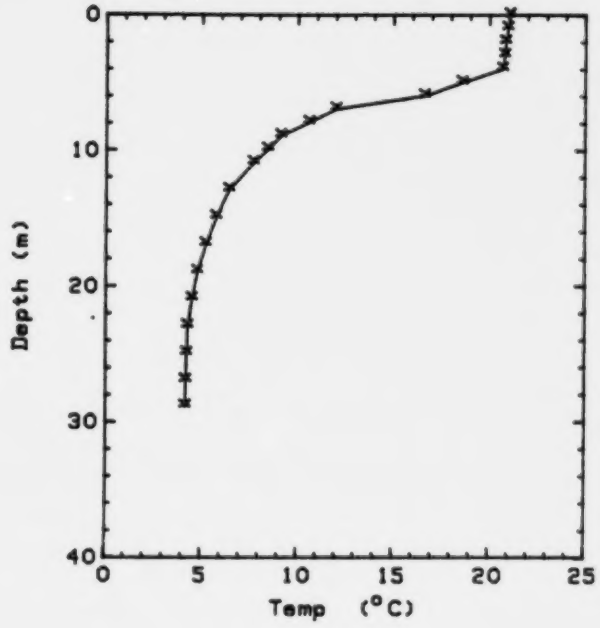
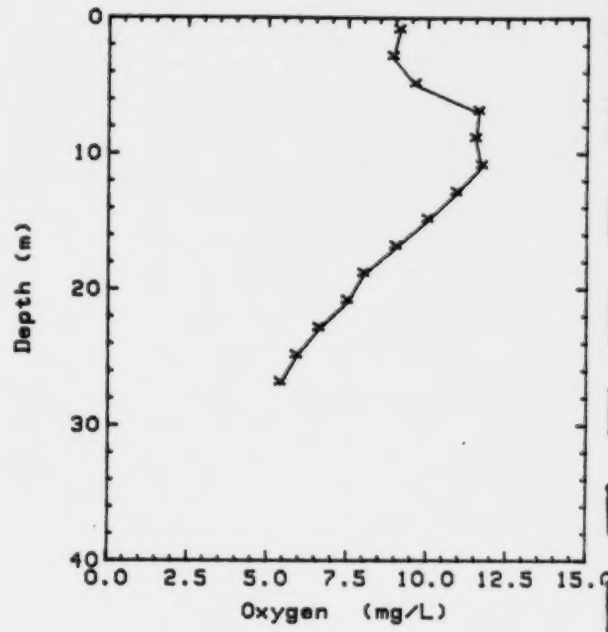
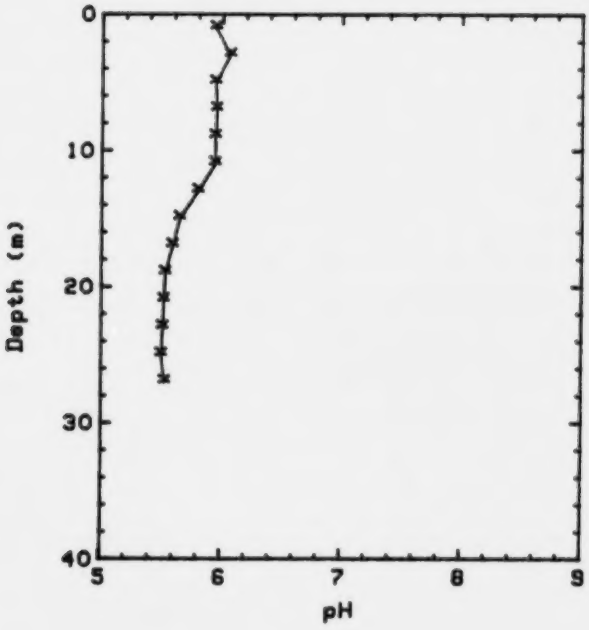



Table 43 con't

# CLEAR LAKE 82.07.06



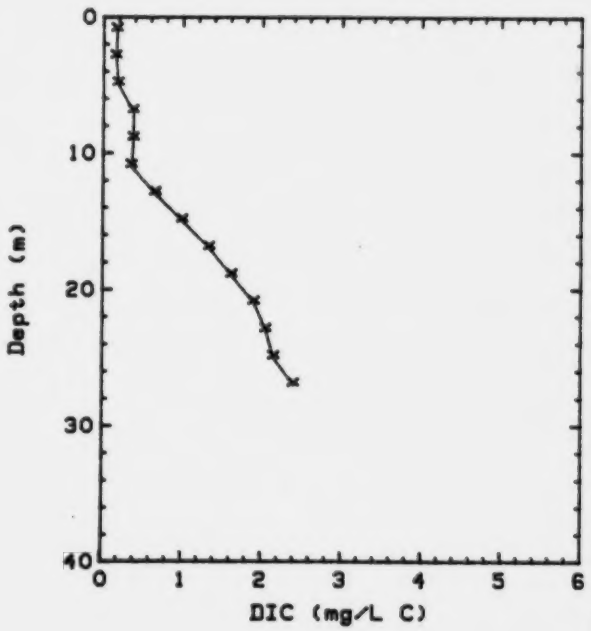
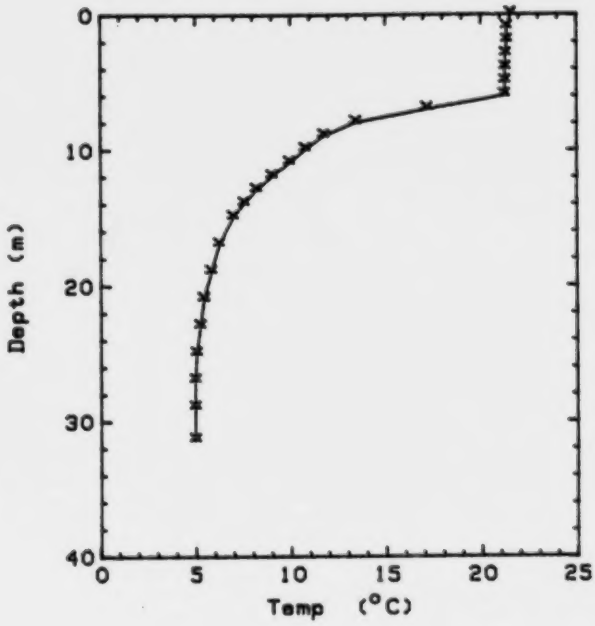
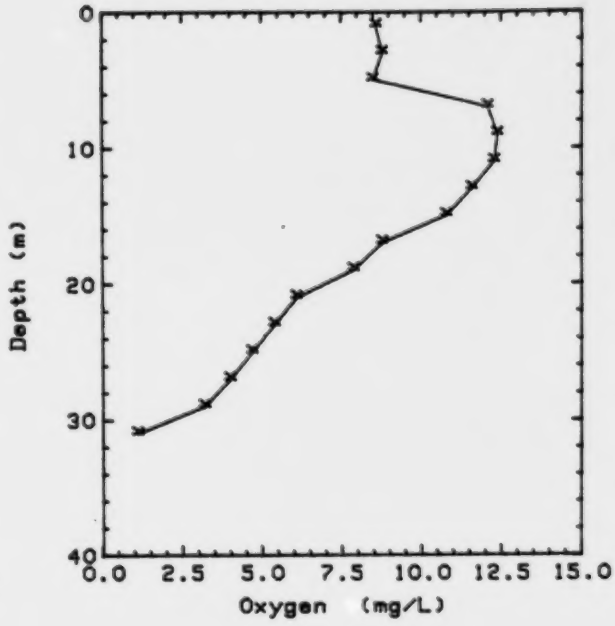
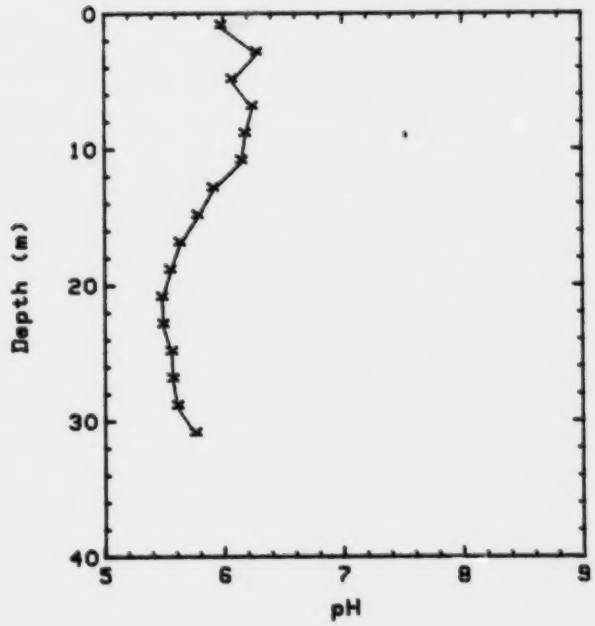



Table 43 con't

# CLEAR LAKE 82.08.05



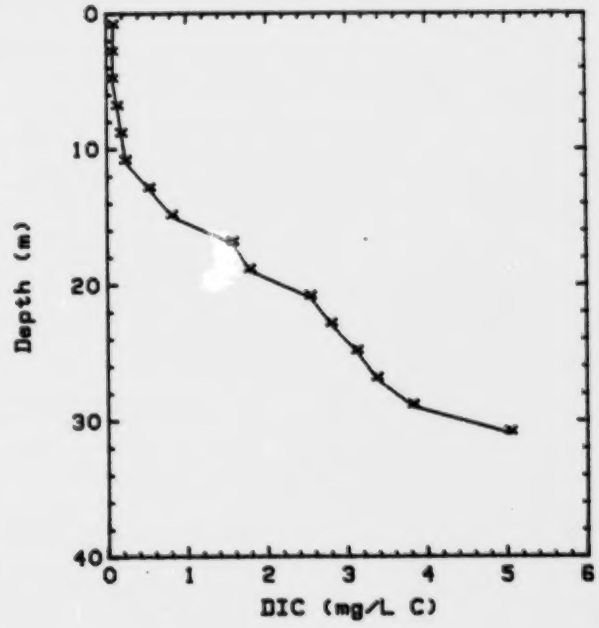
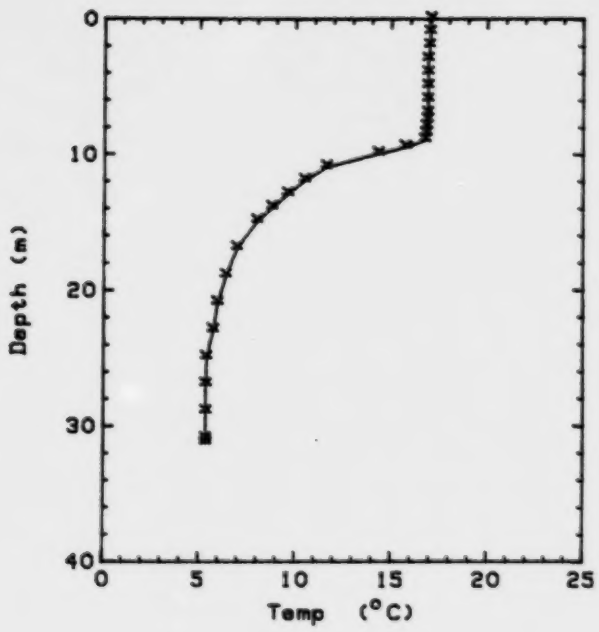
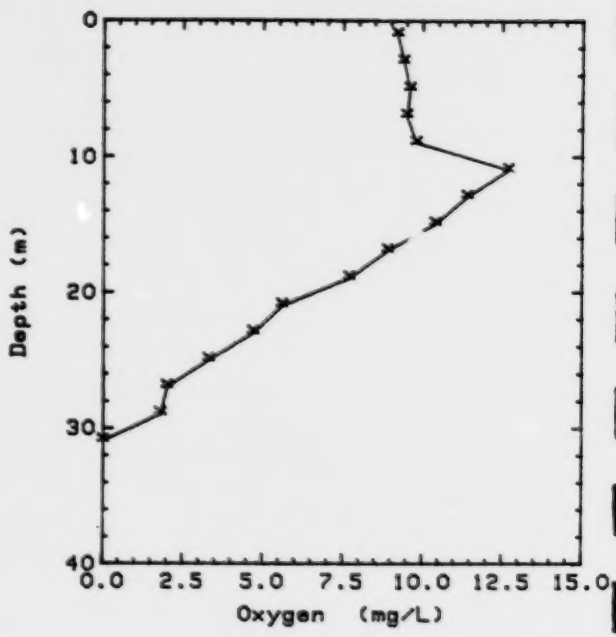
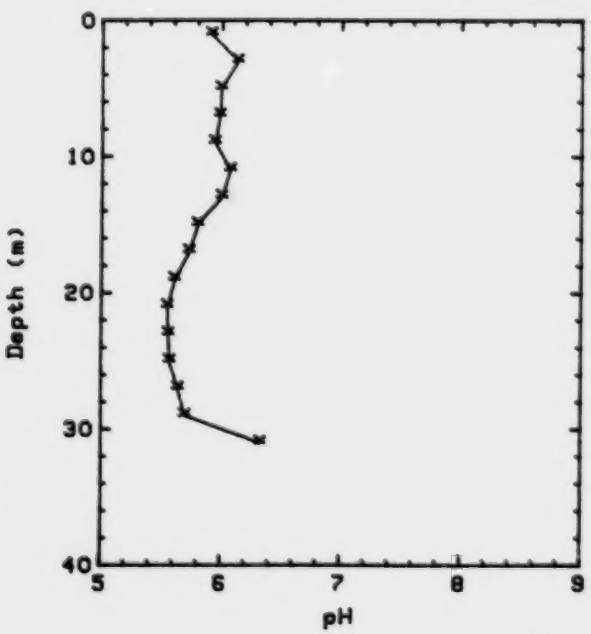



Table 43 con't

# CLEAR LAKE 82.09.28



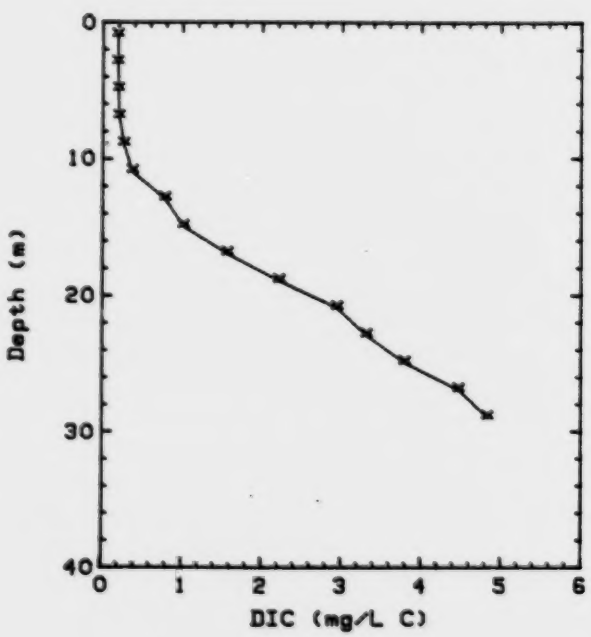
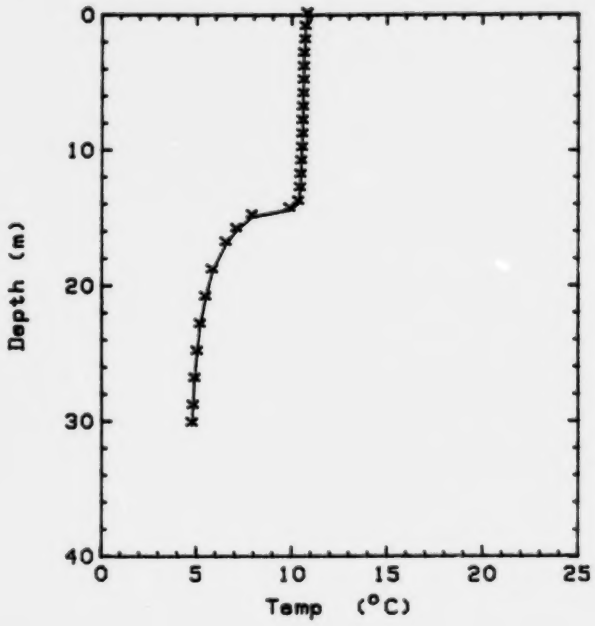
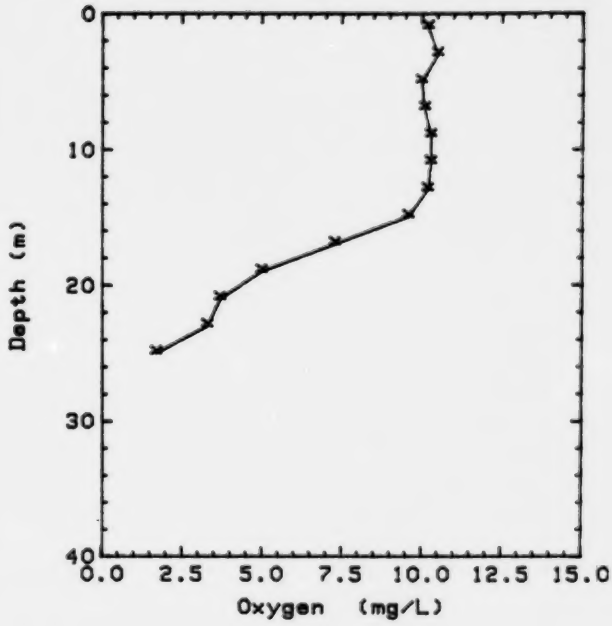
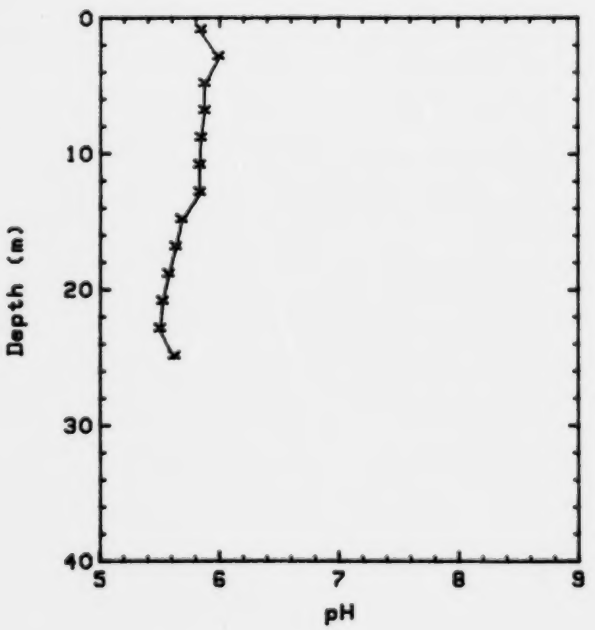



Table 43 con't

# CLEAR LAKE 82.11.01



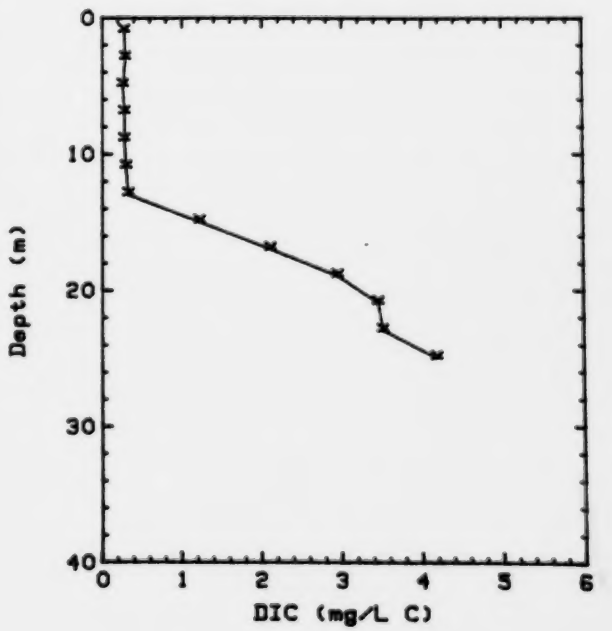
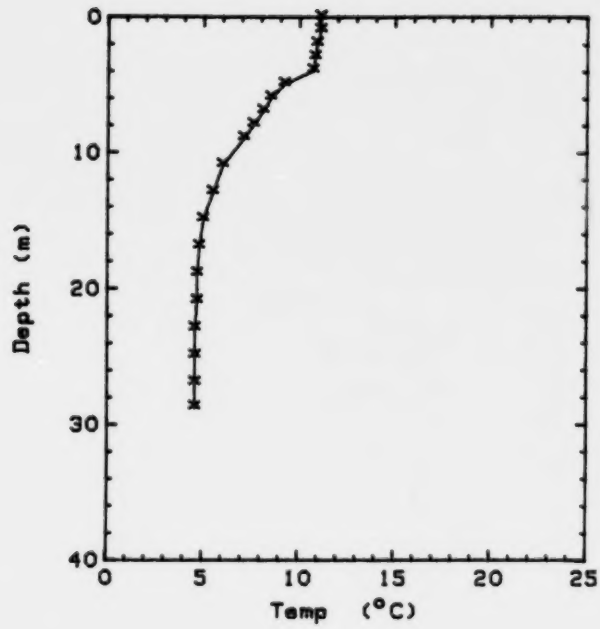
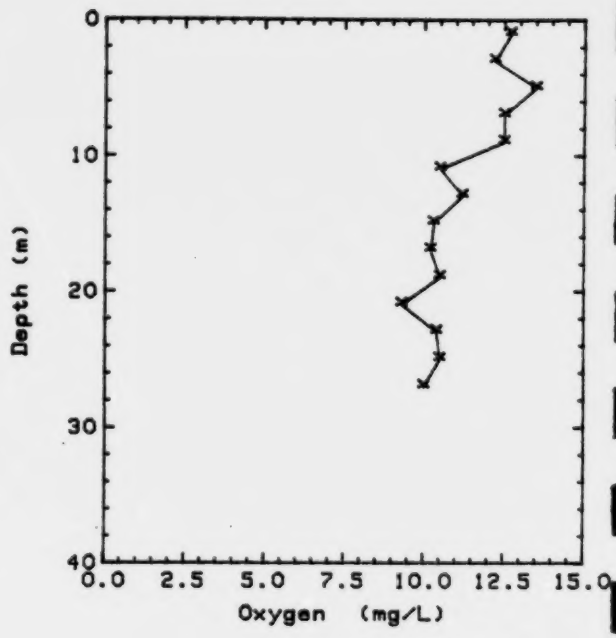
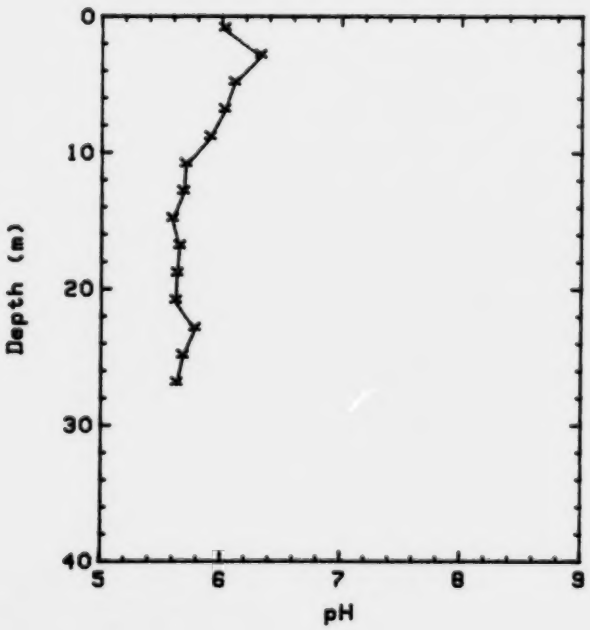



Table 43 con't

# CLEAR LAKE 83.05.18



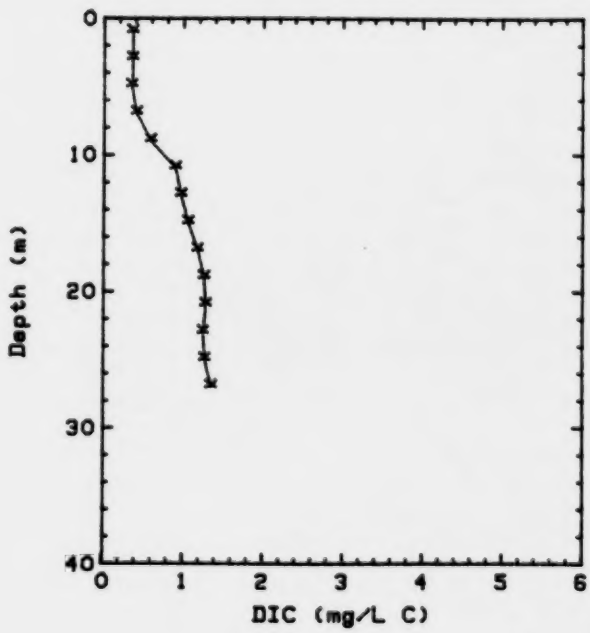
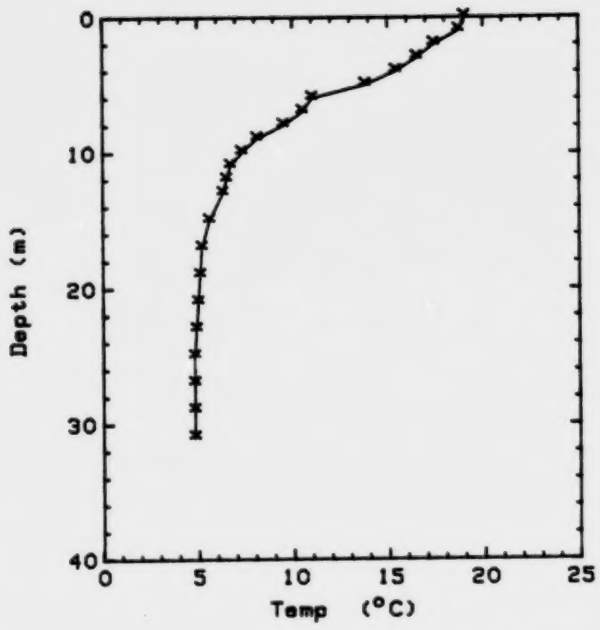
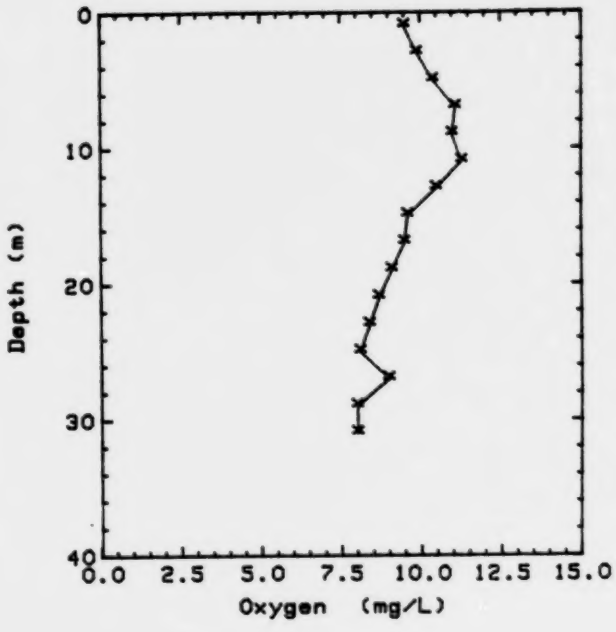
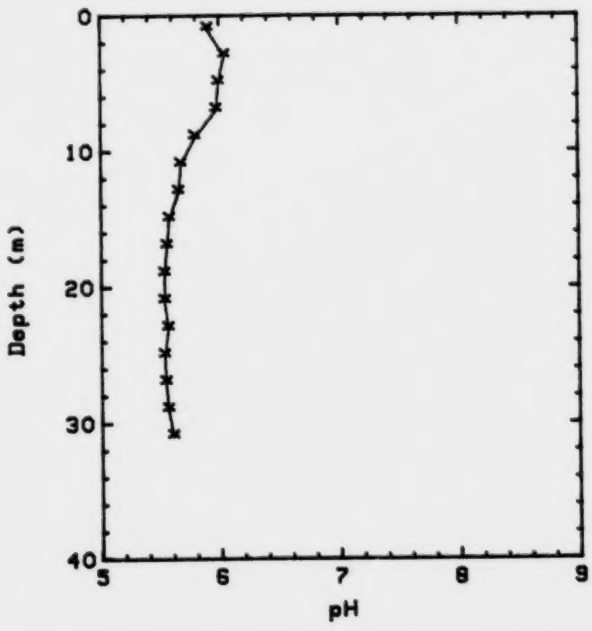



Table 43 con't

# CLEAR LAKE 83.06.14



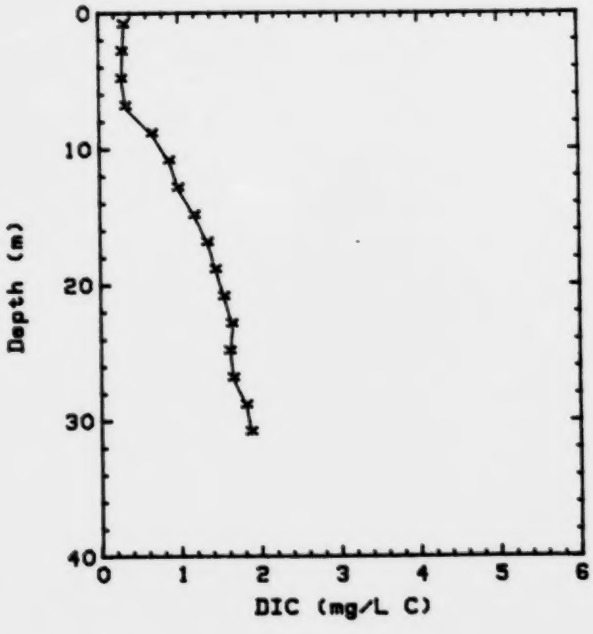
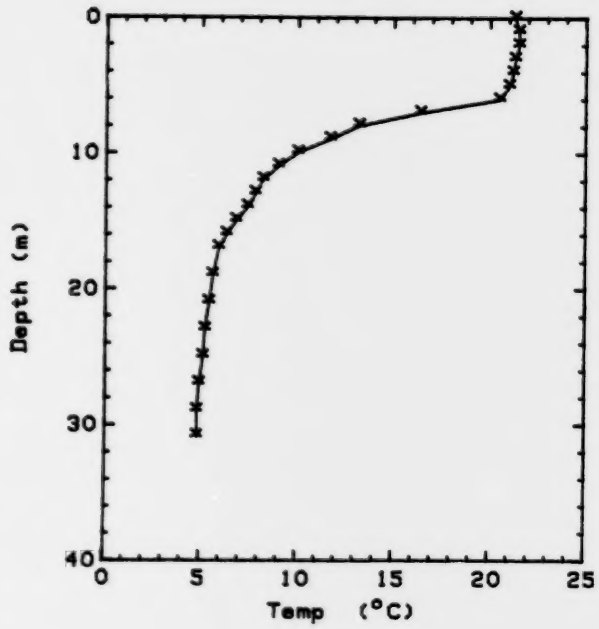
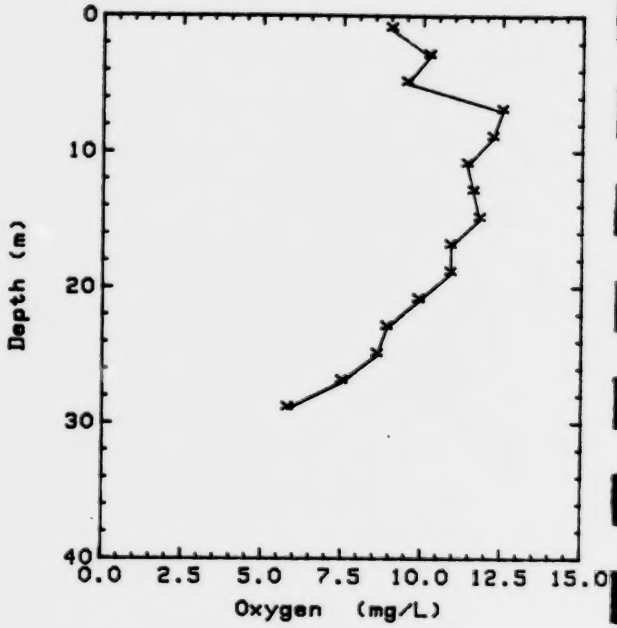
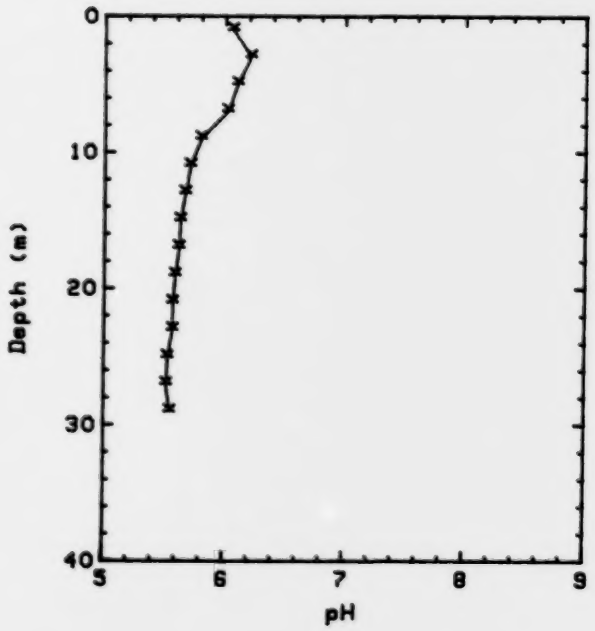



Table 43 con't

# CLEAR LAKE 83.07.13



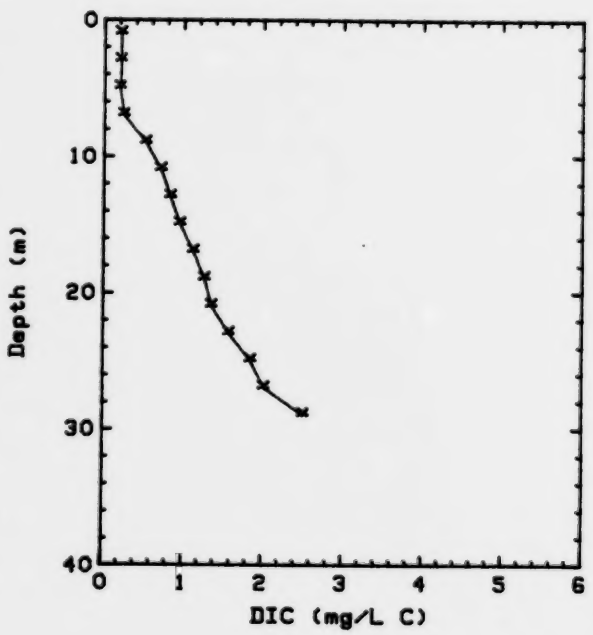
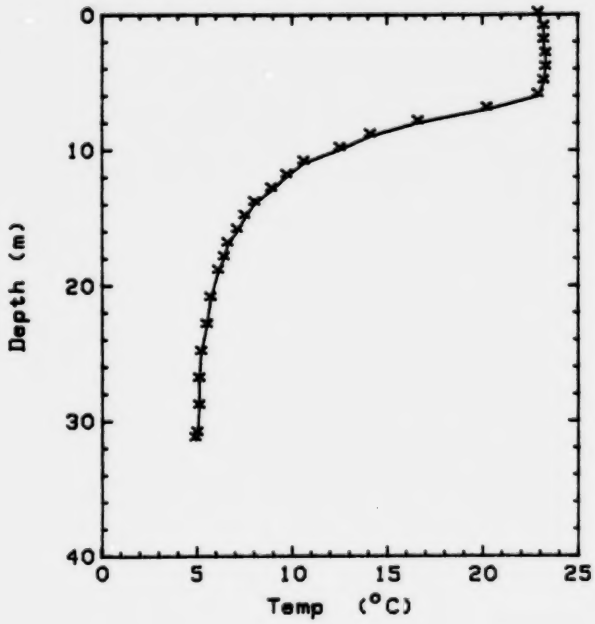
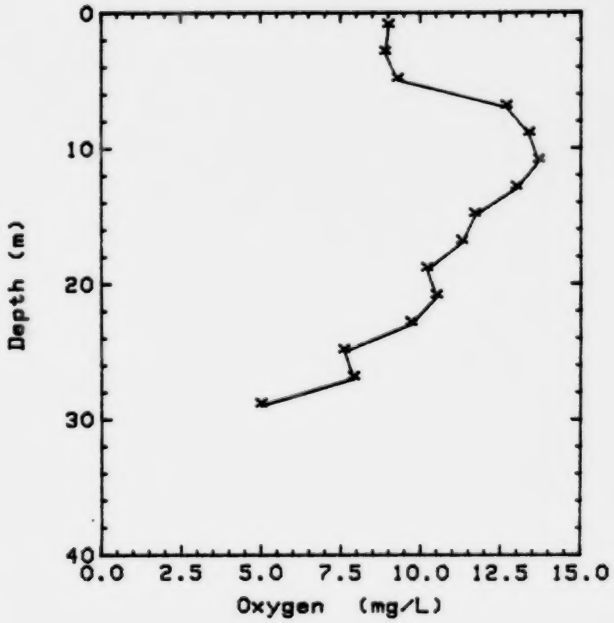
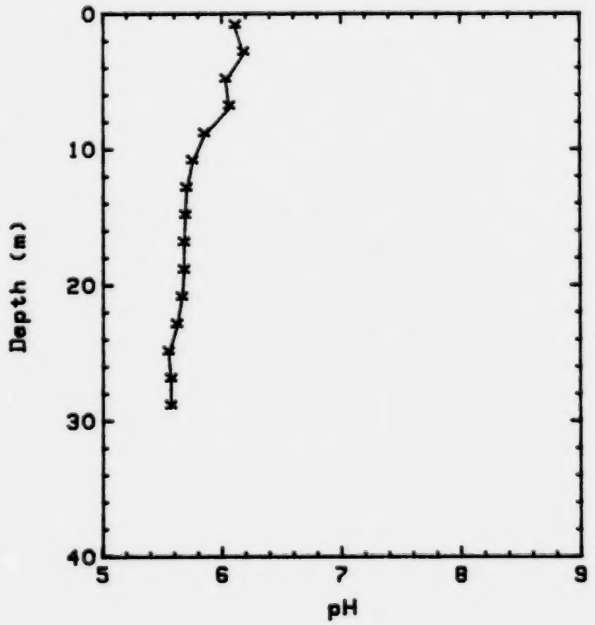



Table 43 con't

# CLEAR LAKE 83.08.09



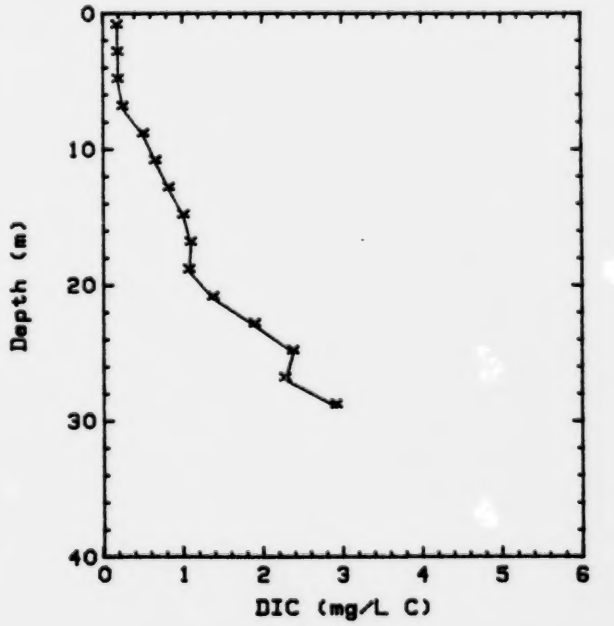
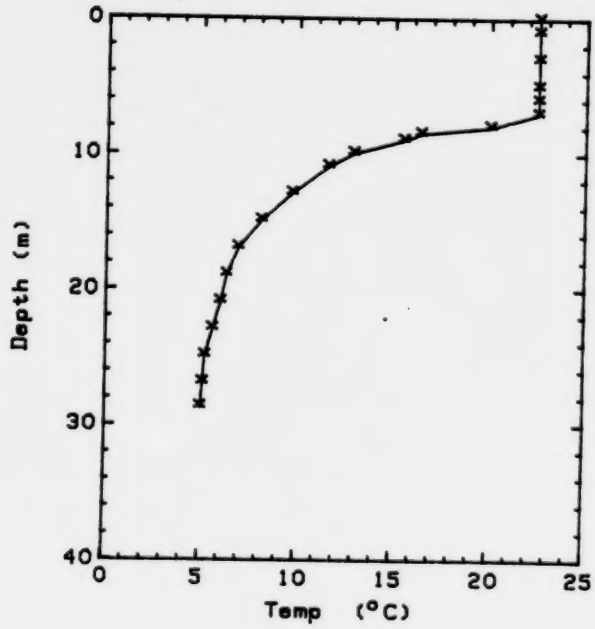
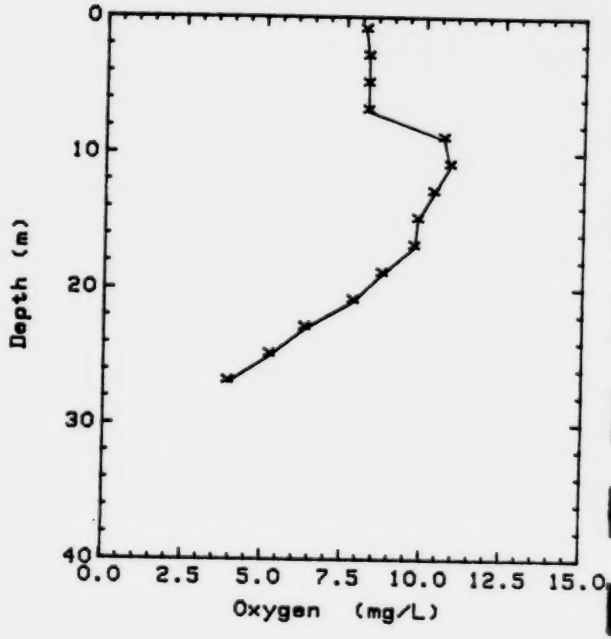
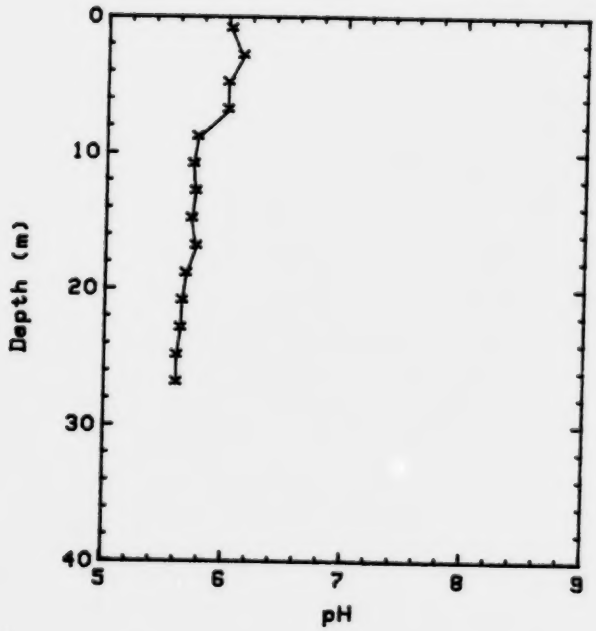



Table 43 con't

CLEAR LAKE 83.09.07



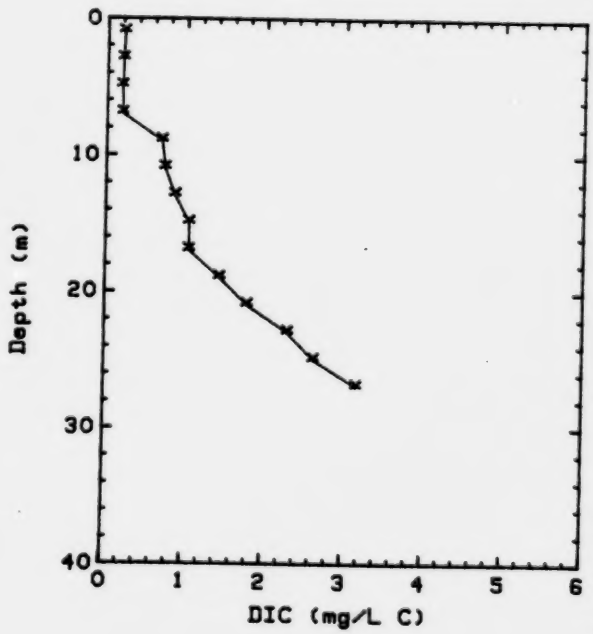
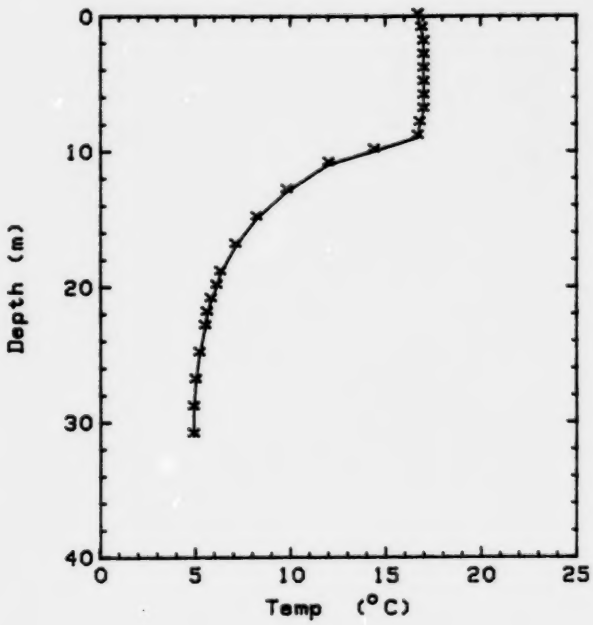
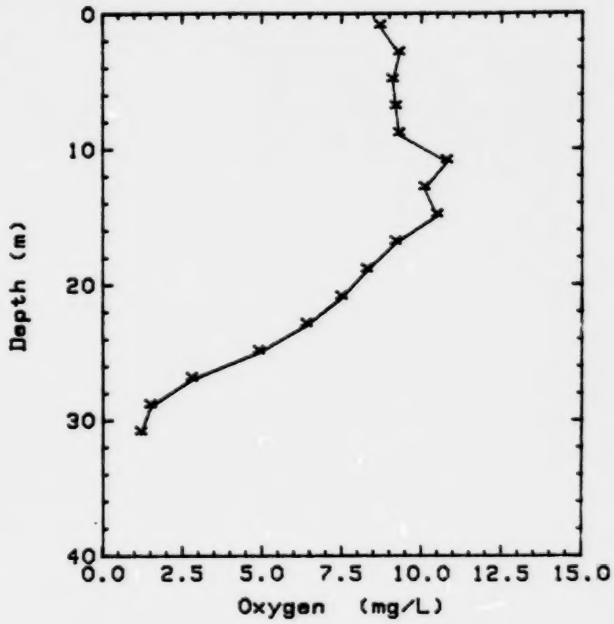
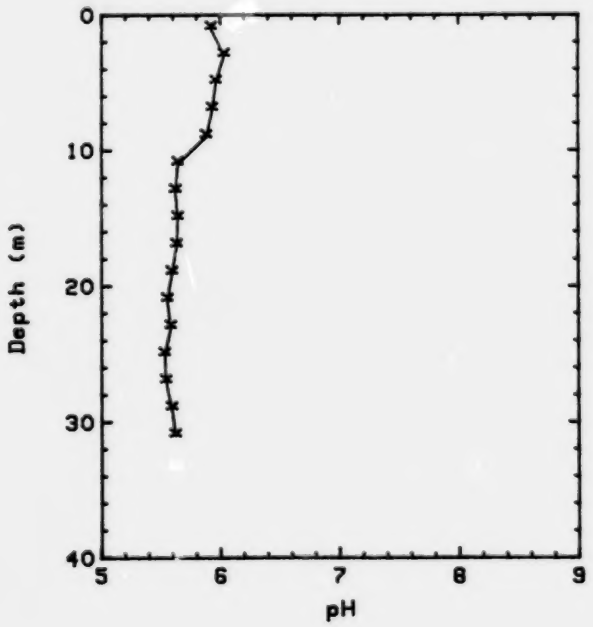



Table 43 con't

# CLEAR LAKE 83.10.04



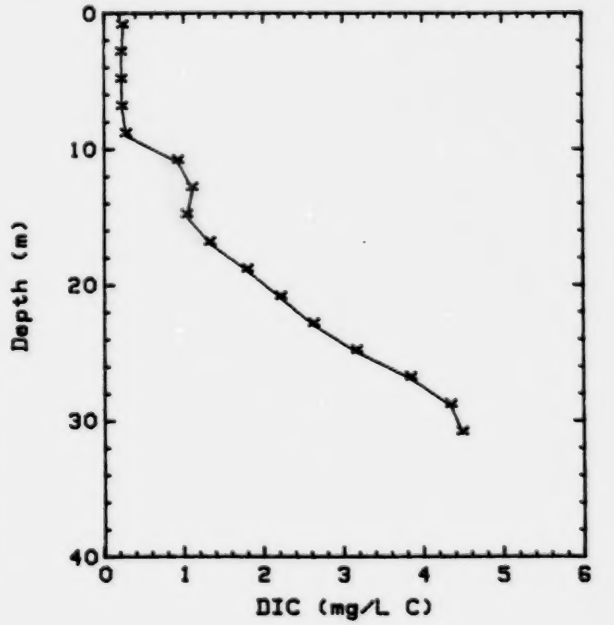
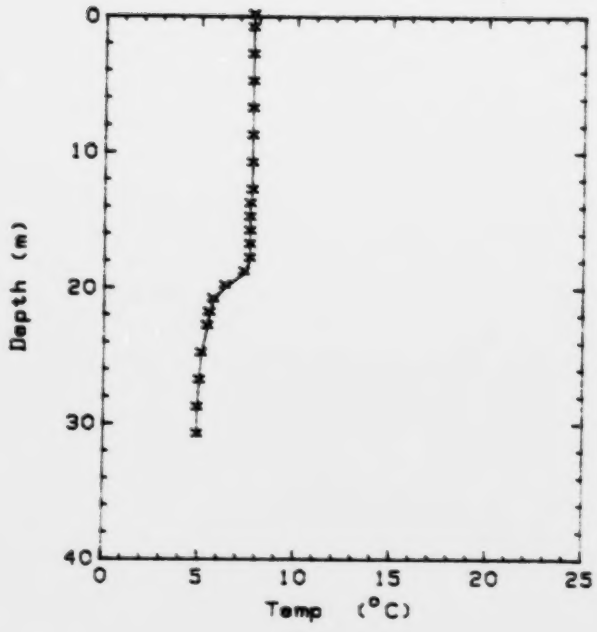
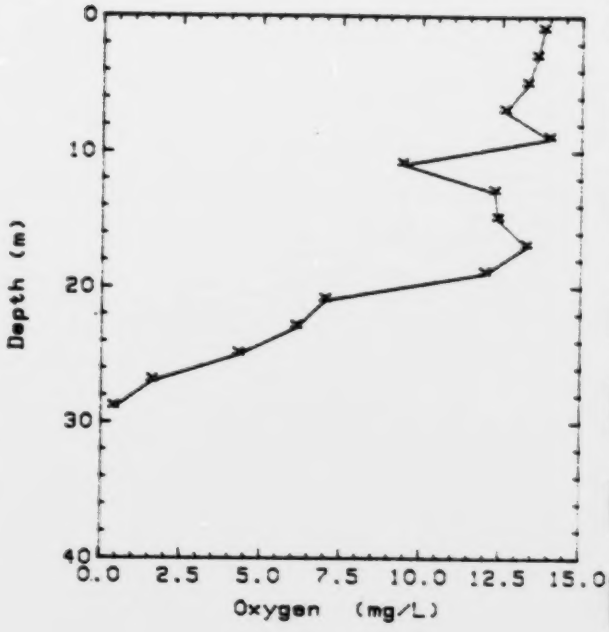
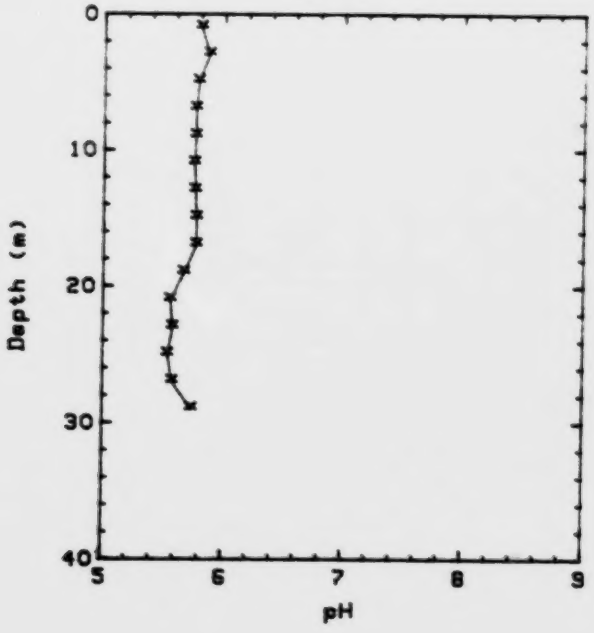



Table 43 con't

# CLEAR LAKE 83.11.09



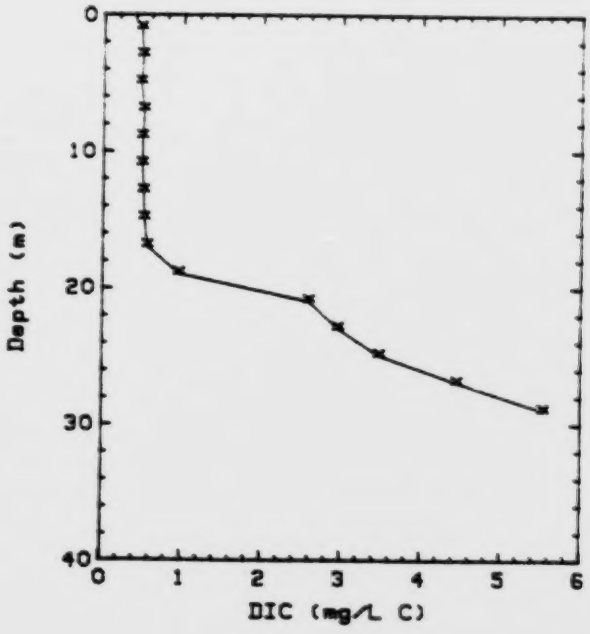



Table 44 Crown Lake

CROWN LAKE 80.06.10

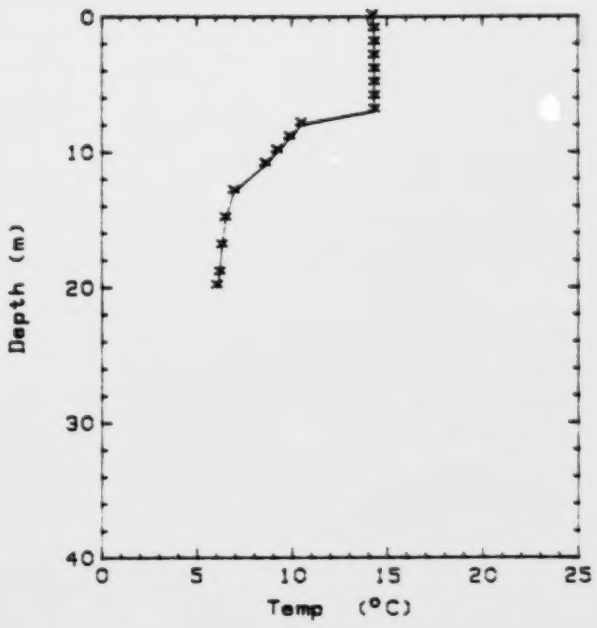
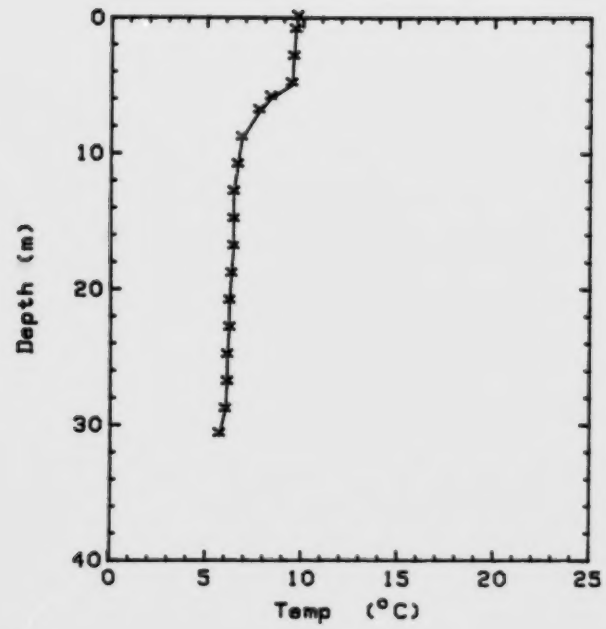
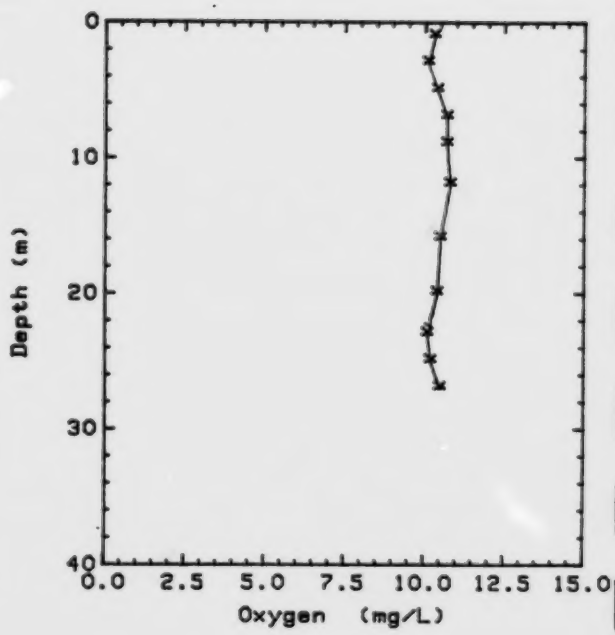
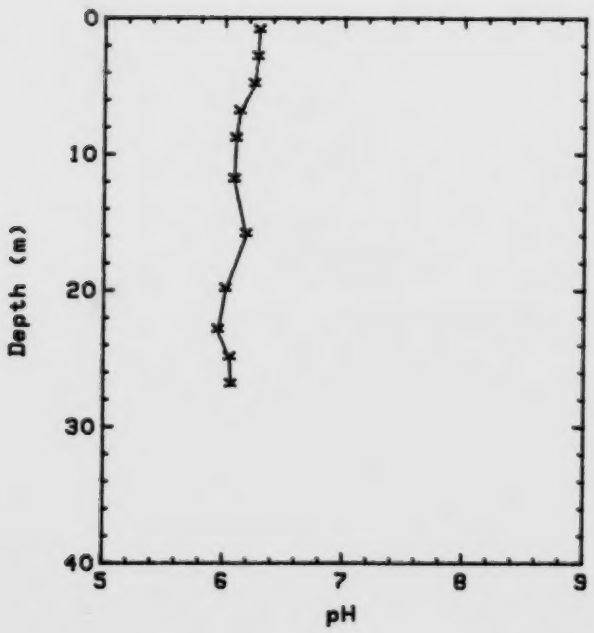


Table 44 con't

# CROWN LAKE 83.05.17



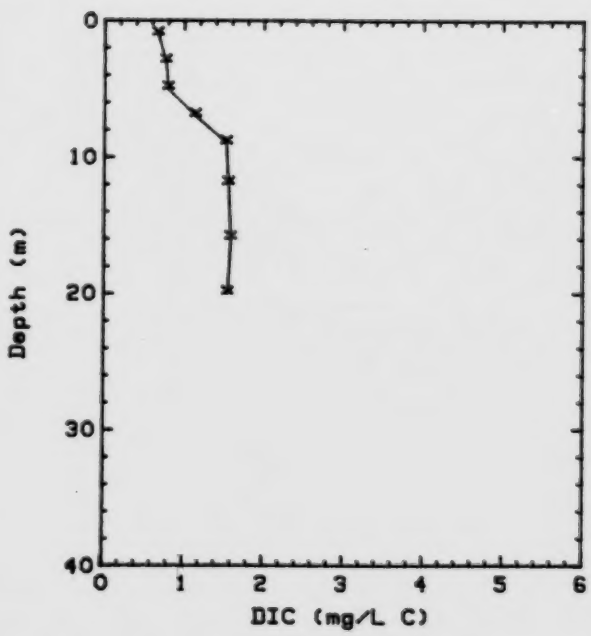
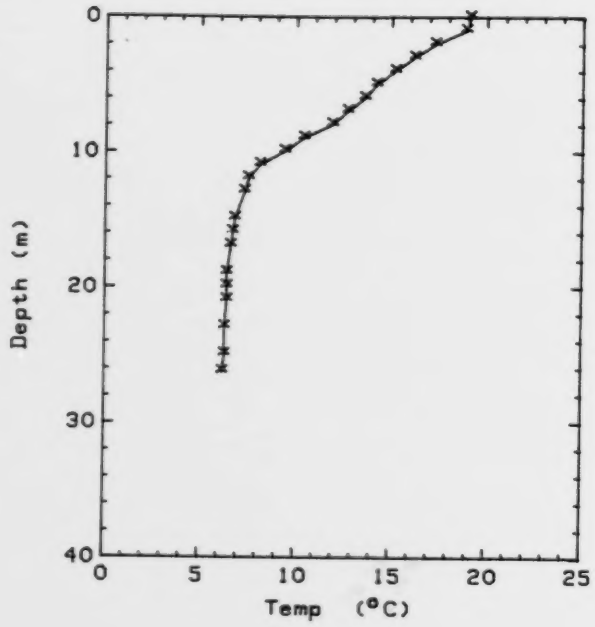
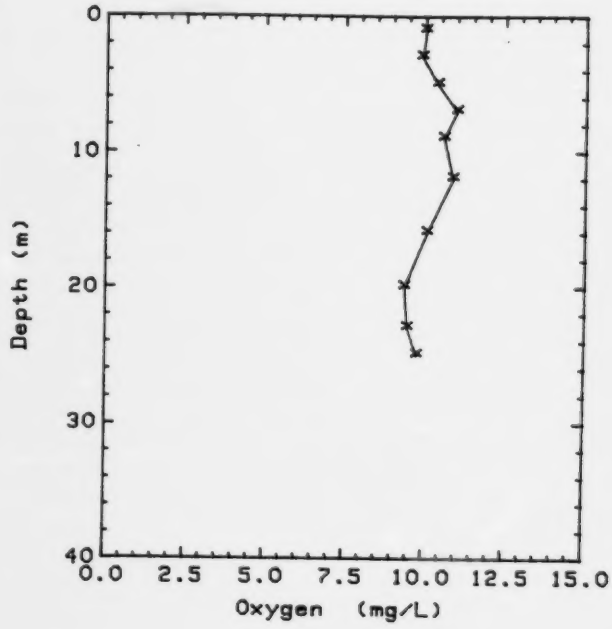



Table 44 con't

# CROWN LAKE 83.06.14



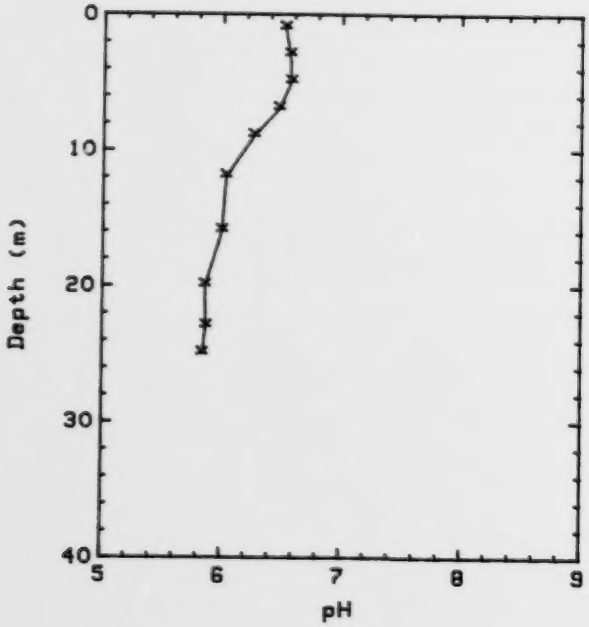
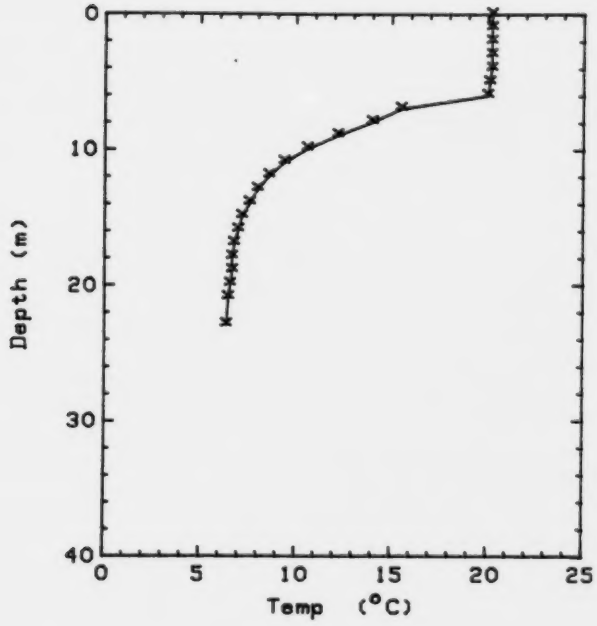
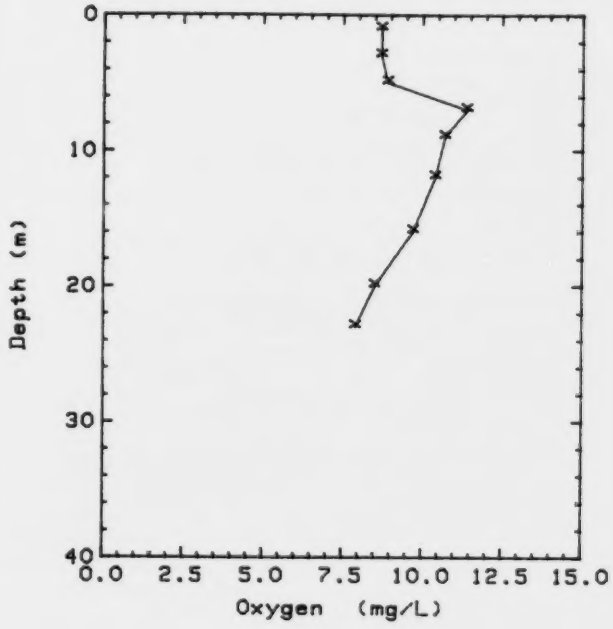



Table 44 con't

# CROWN LAKE 83.07.12



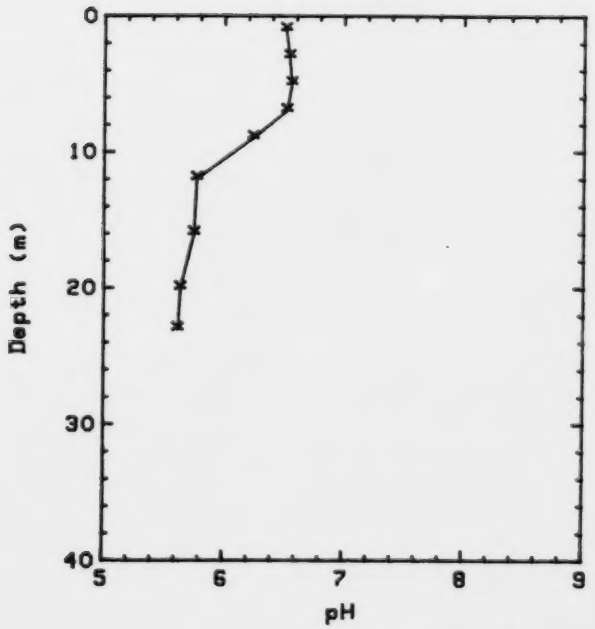
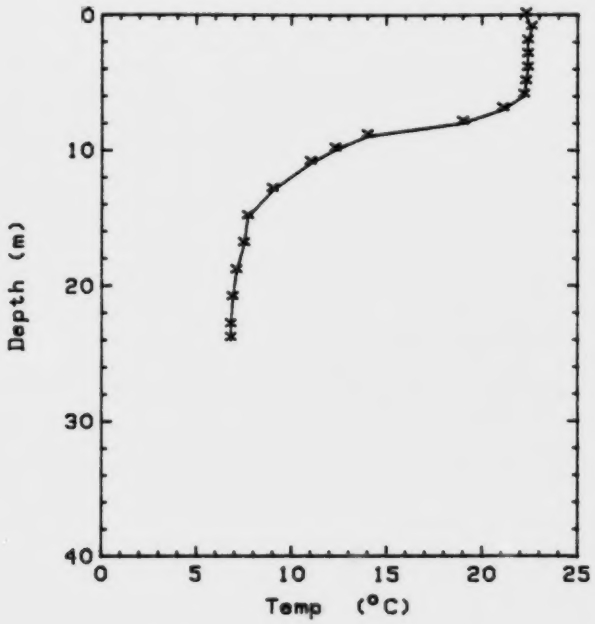
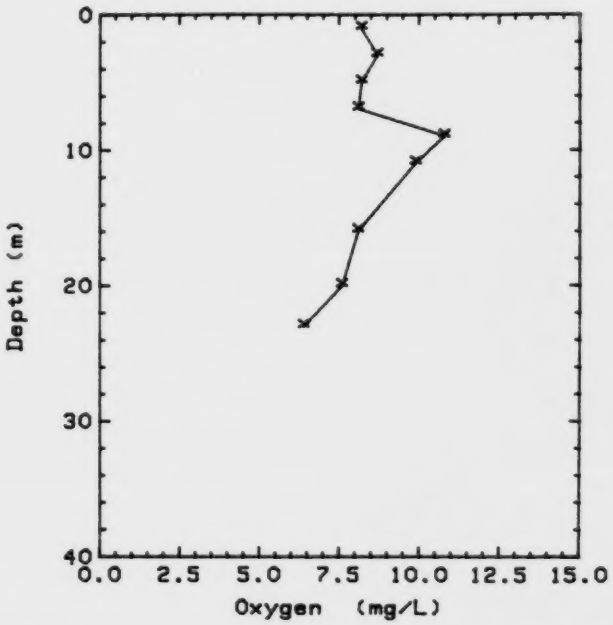



Table 44 con't

# CROWN LAKE 83.08.10



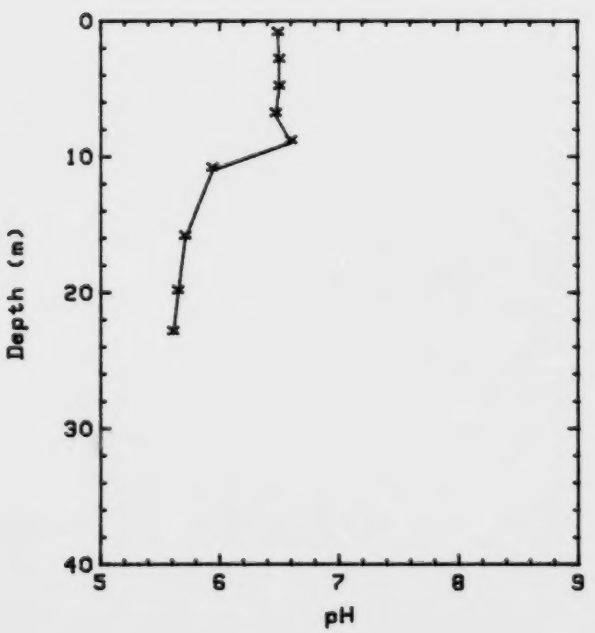
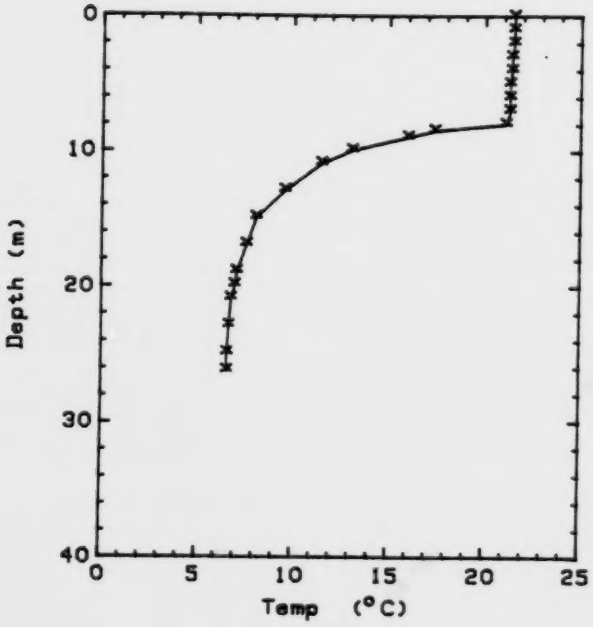
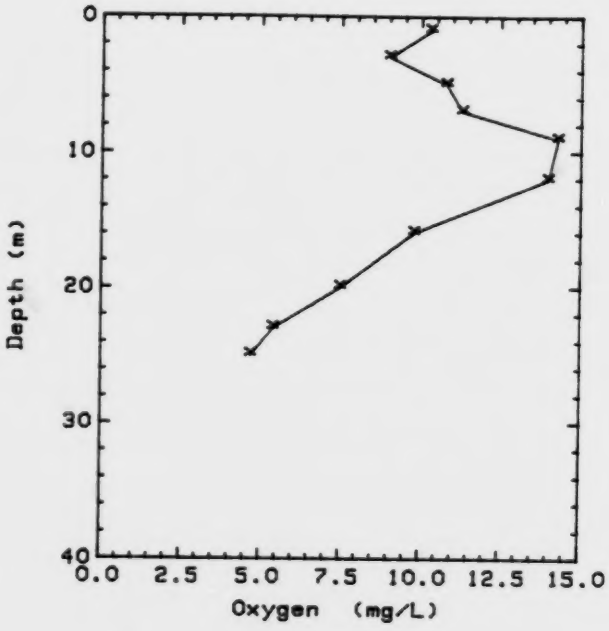



Table 44 con't

# CROWN LAKE 83.09.08



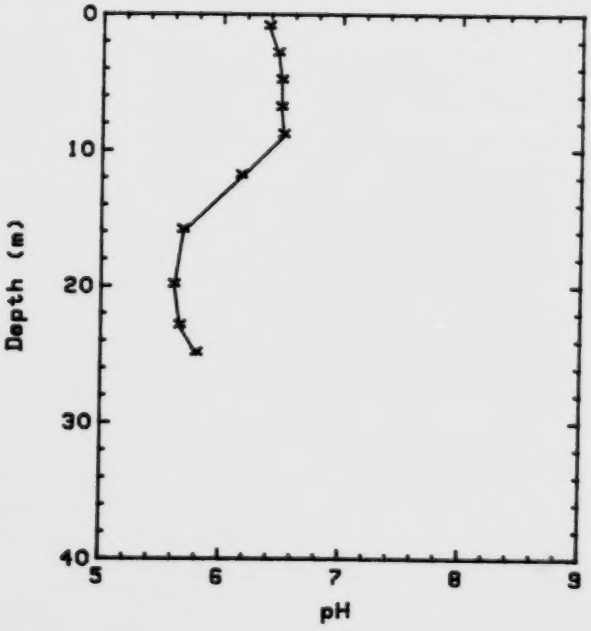
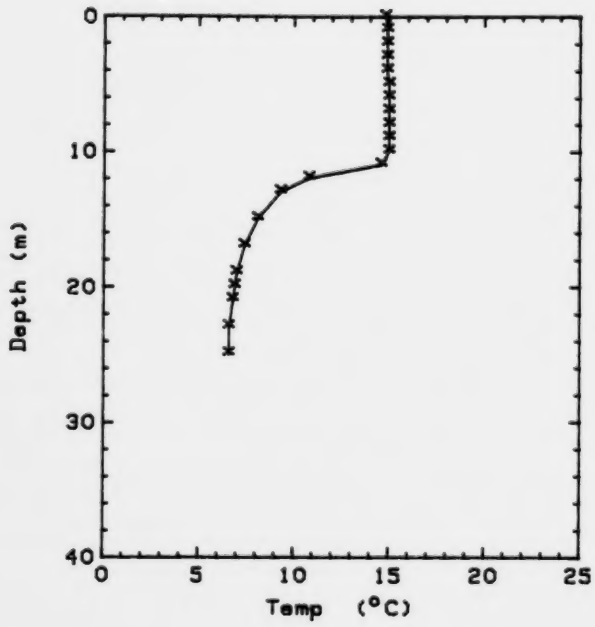
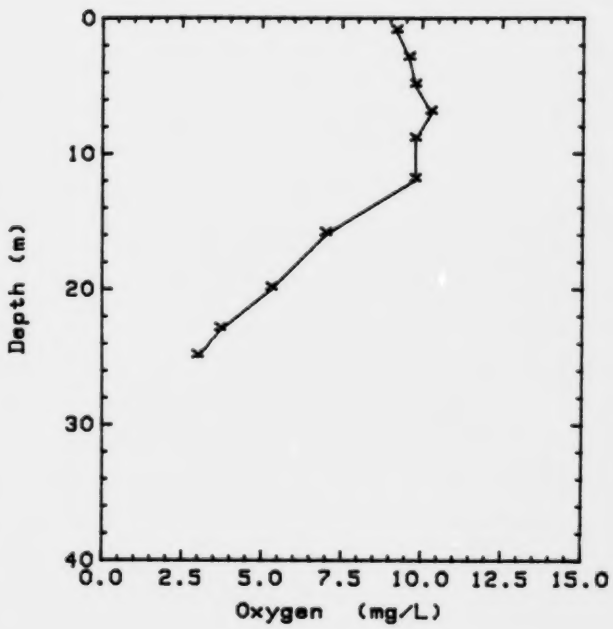



Table 44 con't

# CROWN LAKE 83.10.06



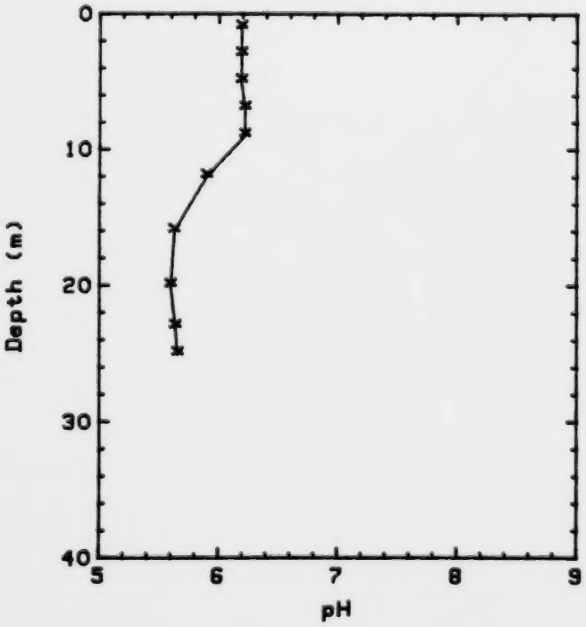
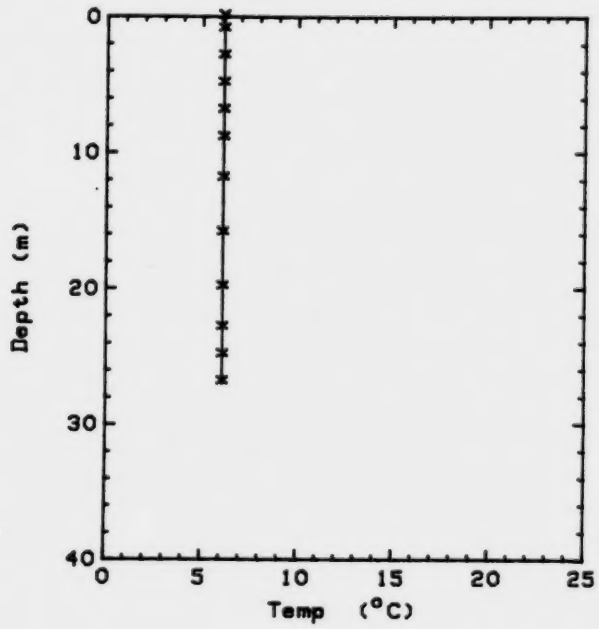
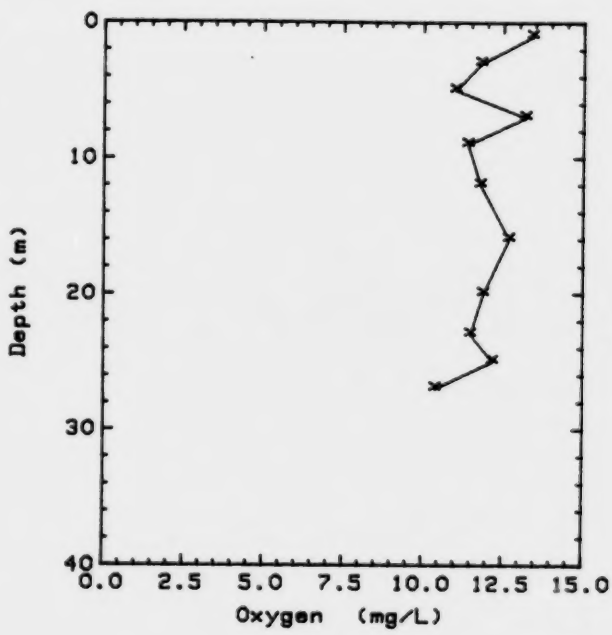



Table 44 con't

# CROWN LAKE 83.11.09



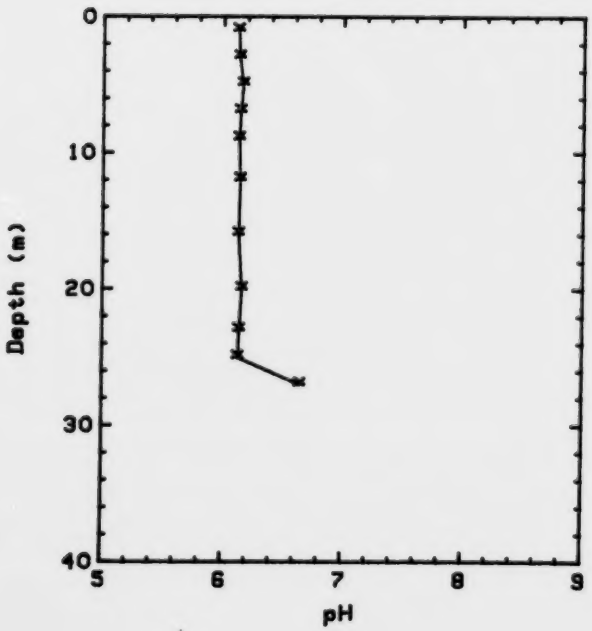
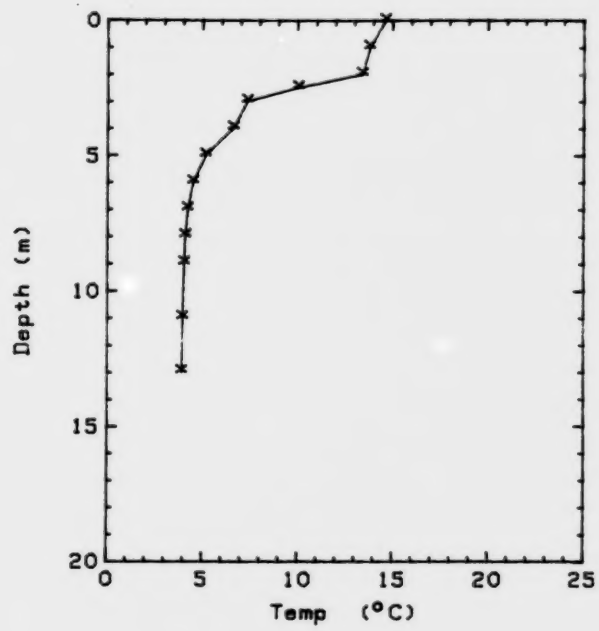
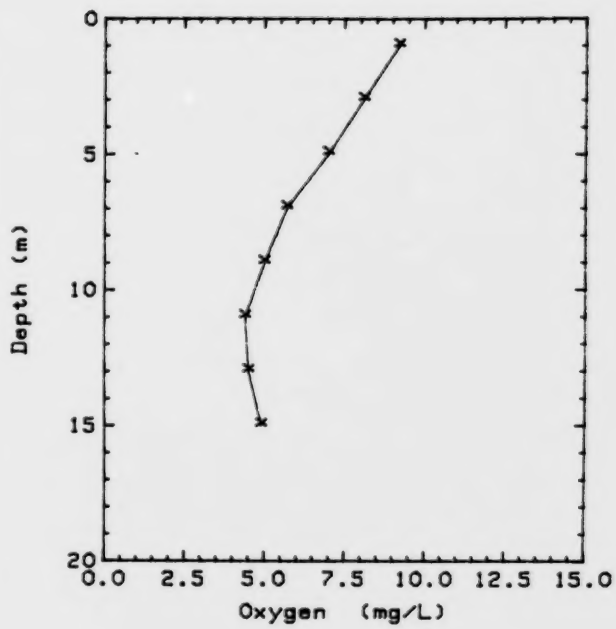
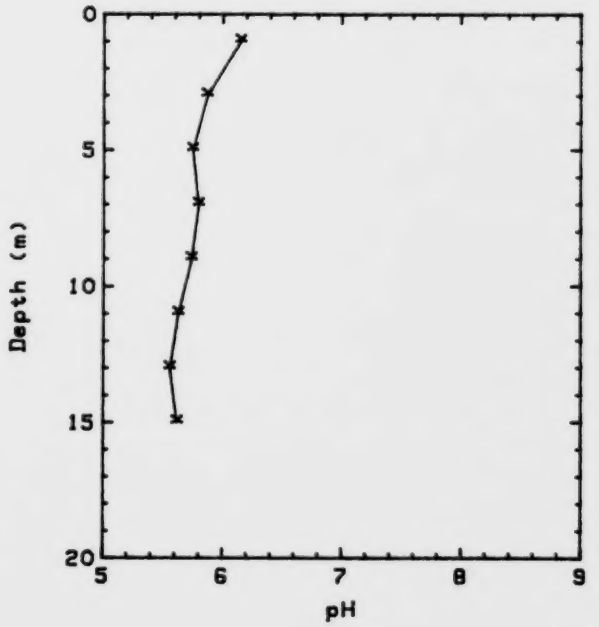



Table 45 Delano Lake

DELANO LAKE 82.05.10



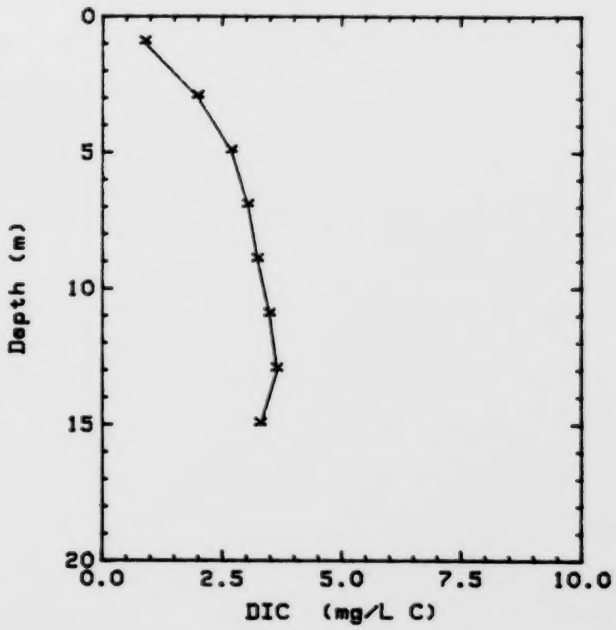
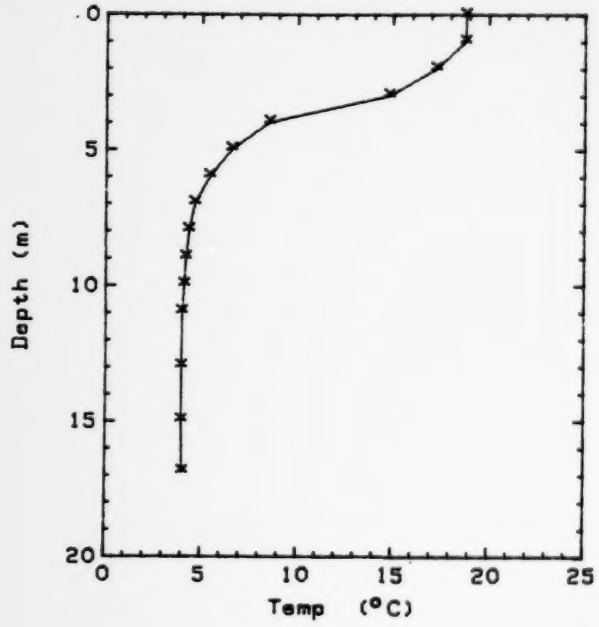
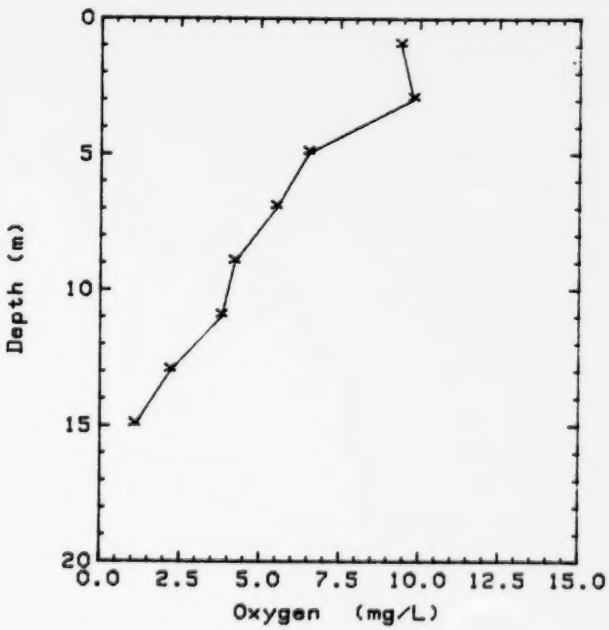
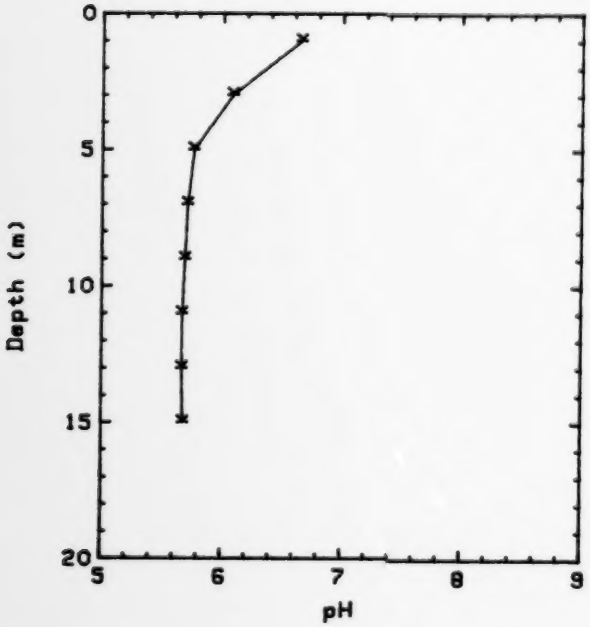



Table 45 con't

# DELANO LAKE 82.06.07



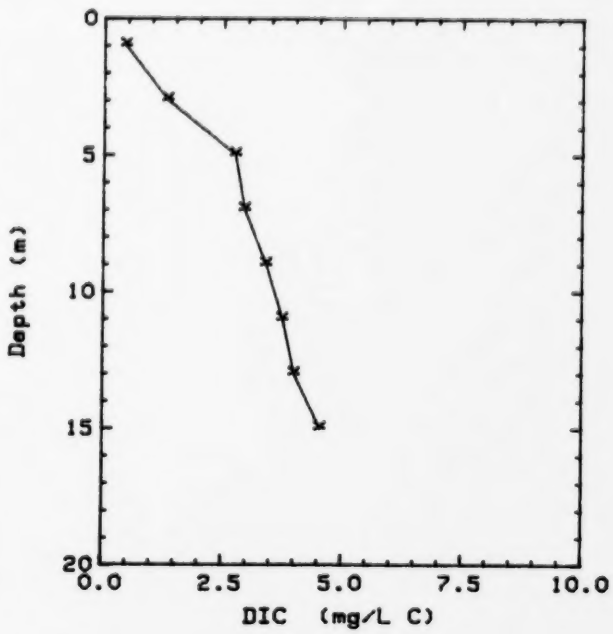
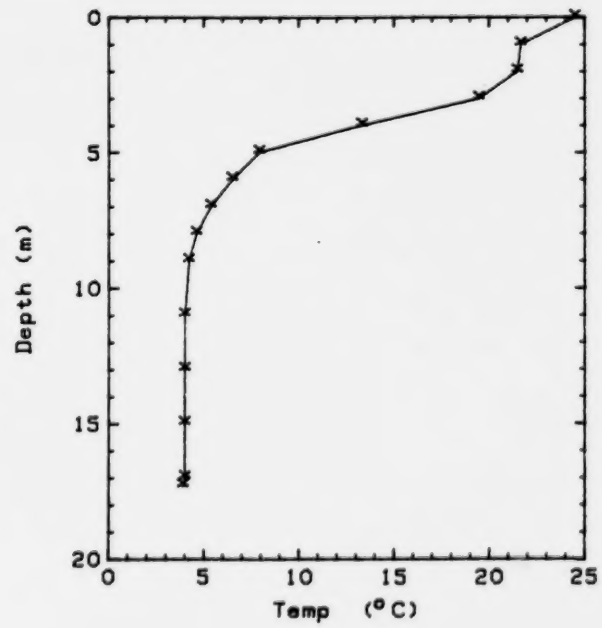
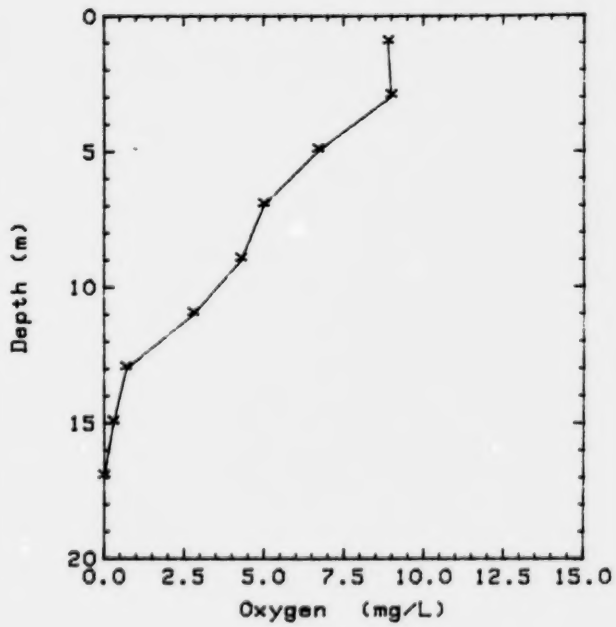
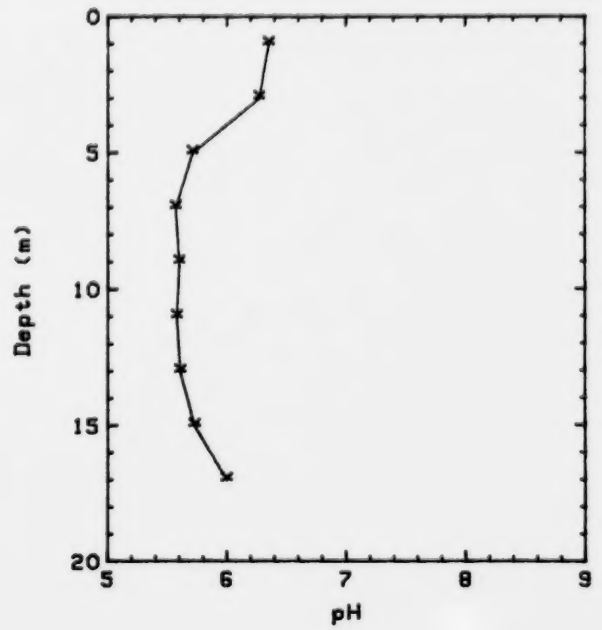



Table 45 con't

# DELANO LAKE 82.07.07



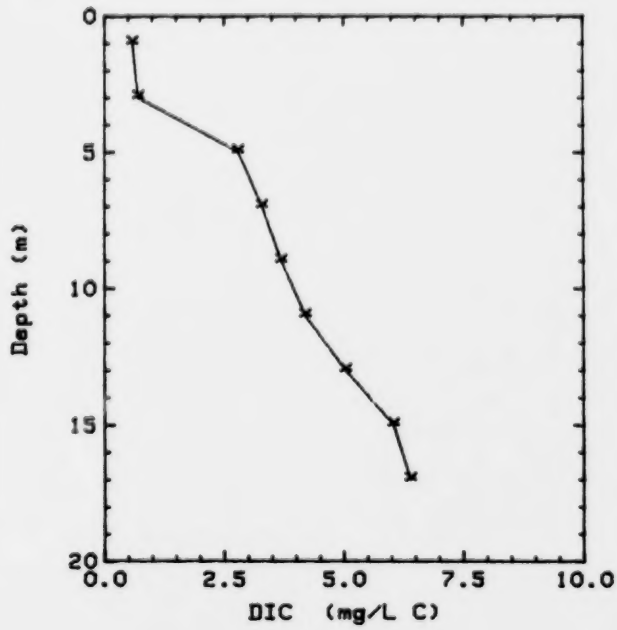
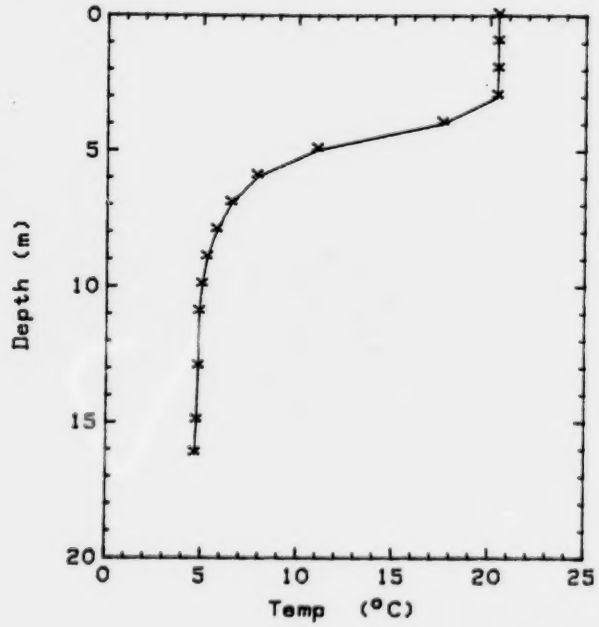
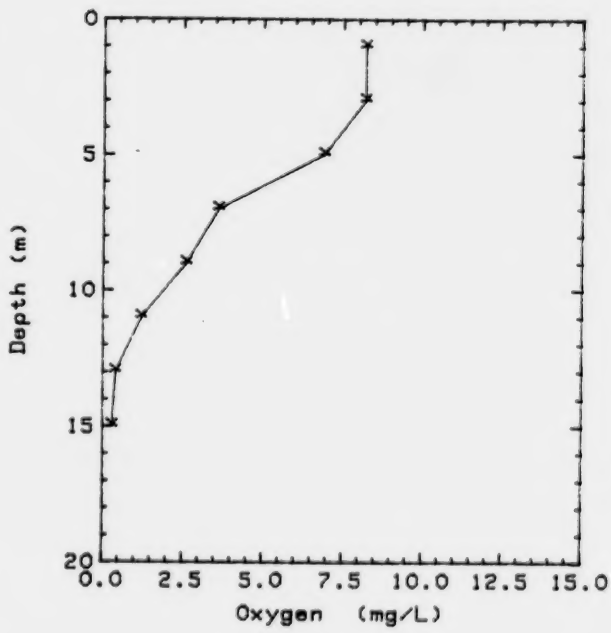
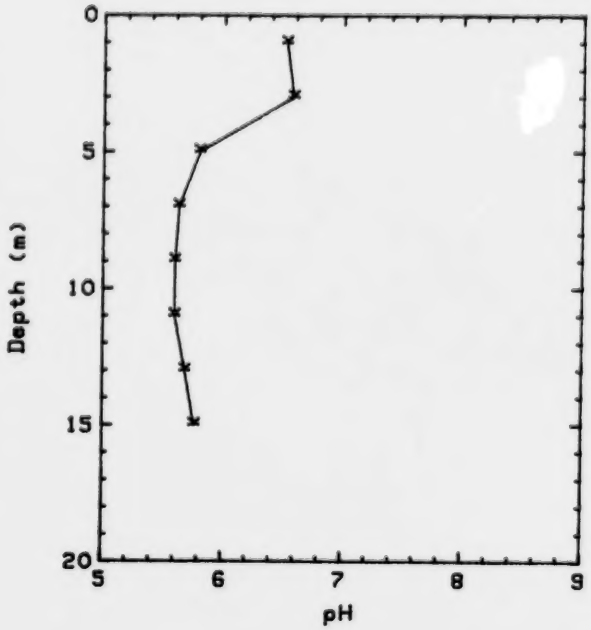



Table 45 con't

# DELANO LAKE 82.08.03



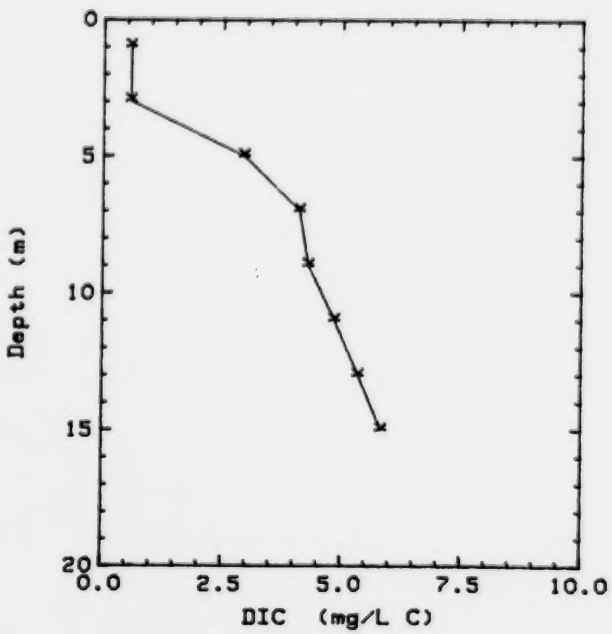
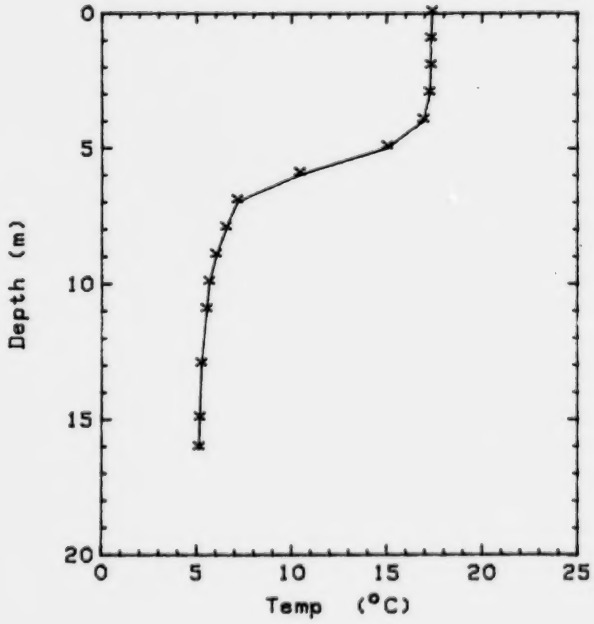
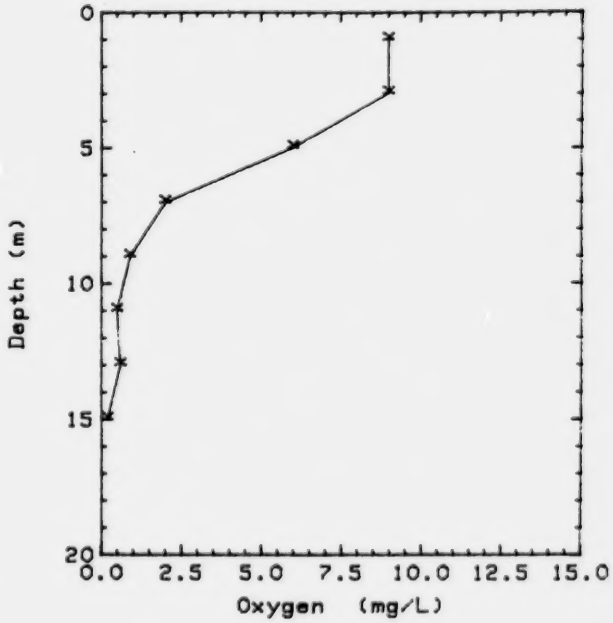
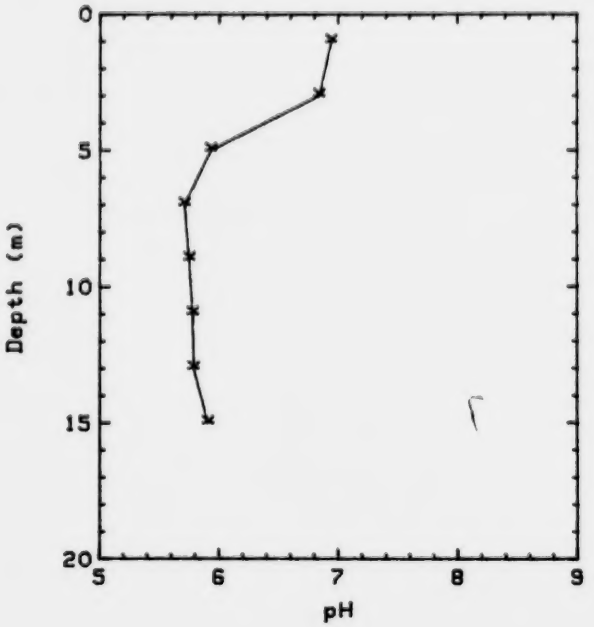



Table 45 con't

# DELANO LAKE 82.09.01



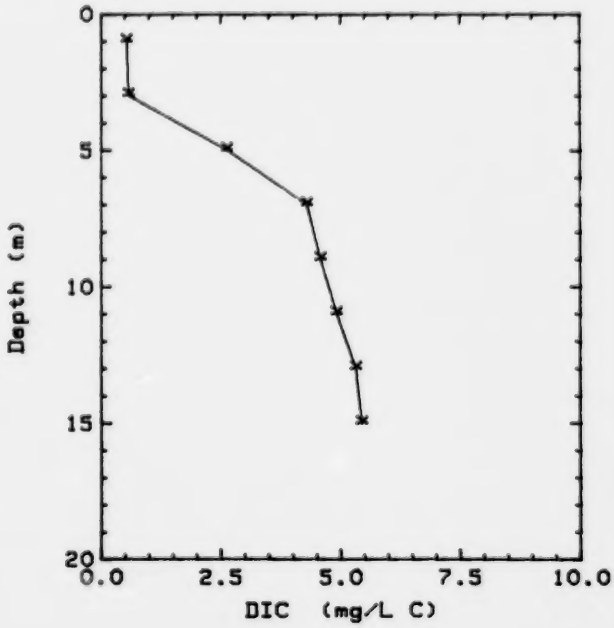
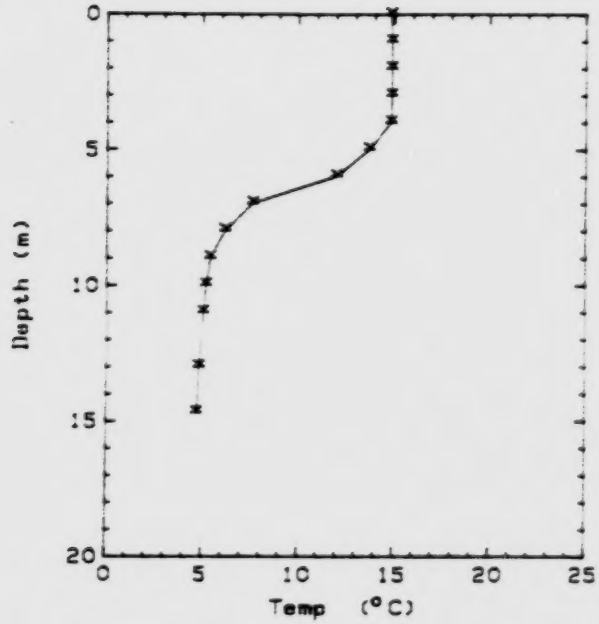
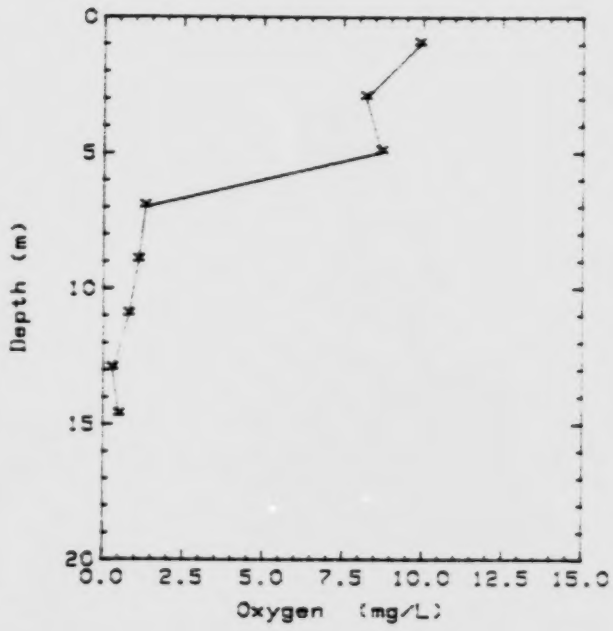
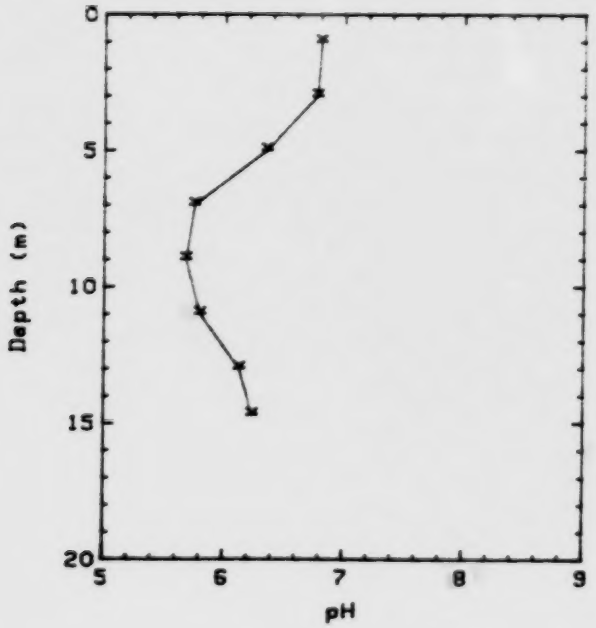



Table 45 con't

DELANO LAKE 82.09.28



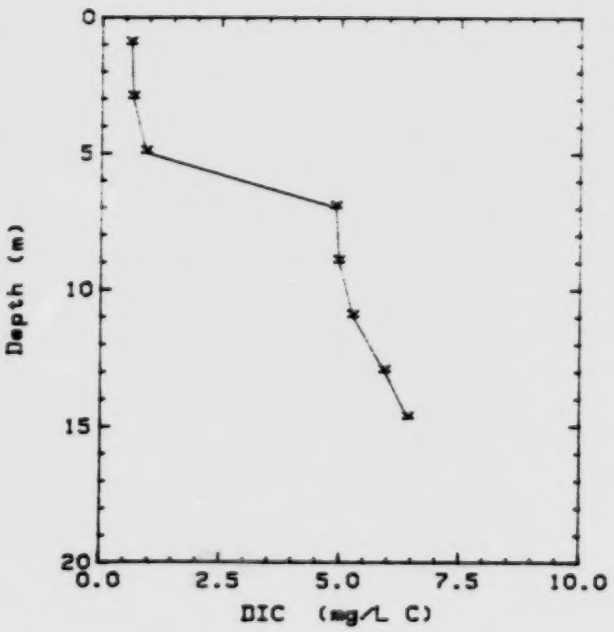
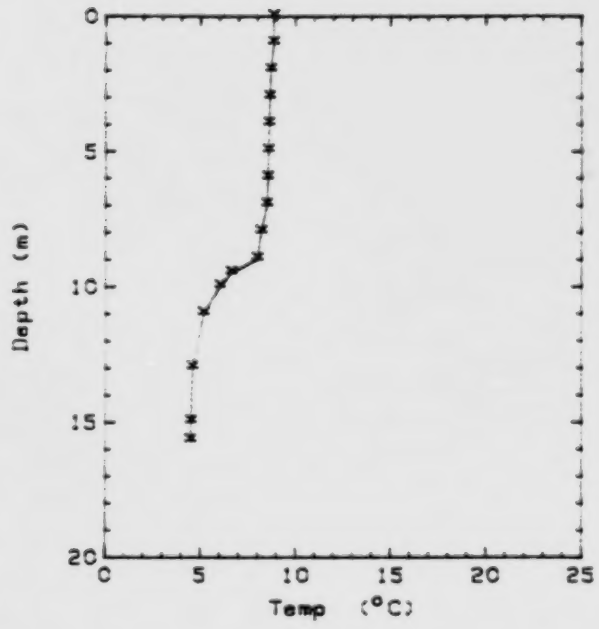
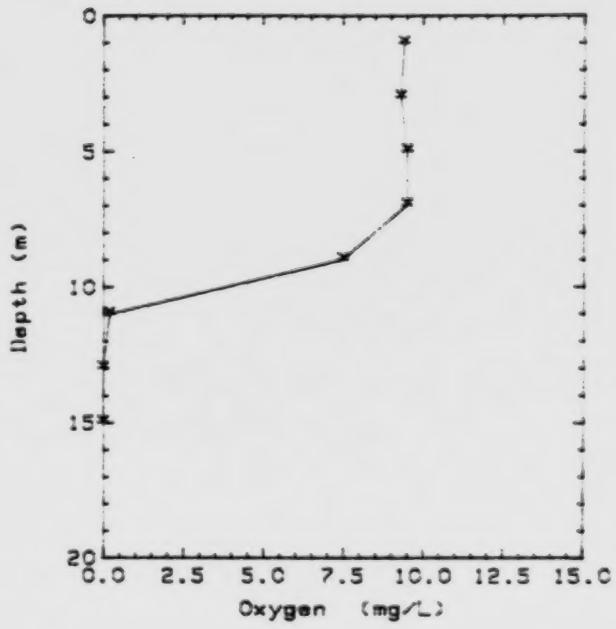
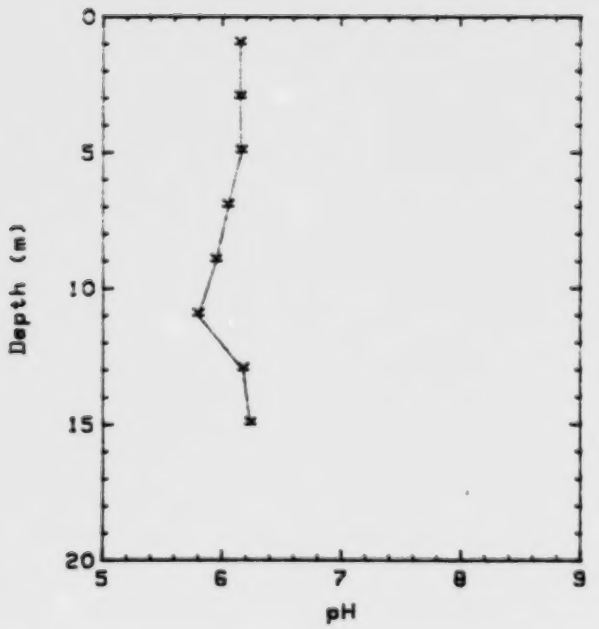



Table 45 con't

# DELANO LAKE 82.11.01



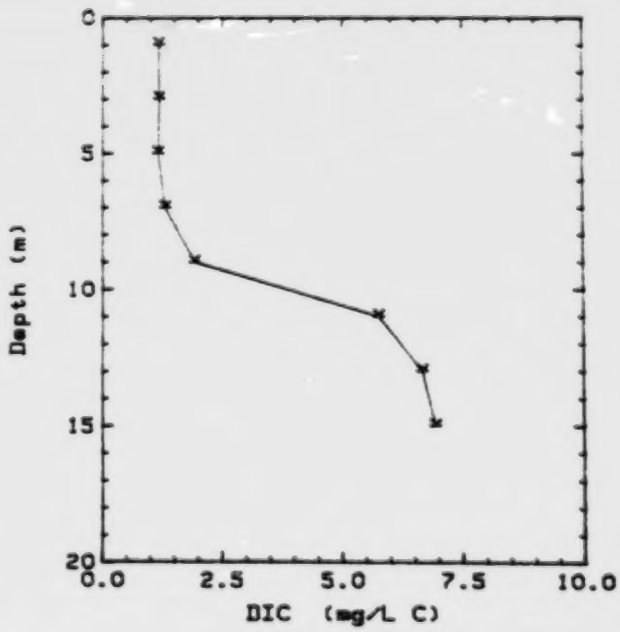
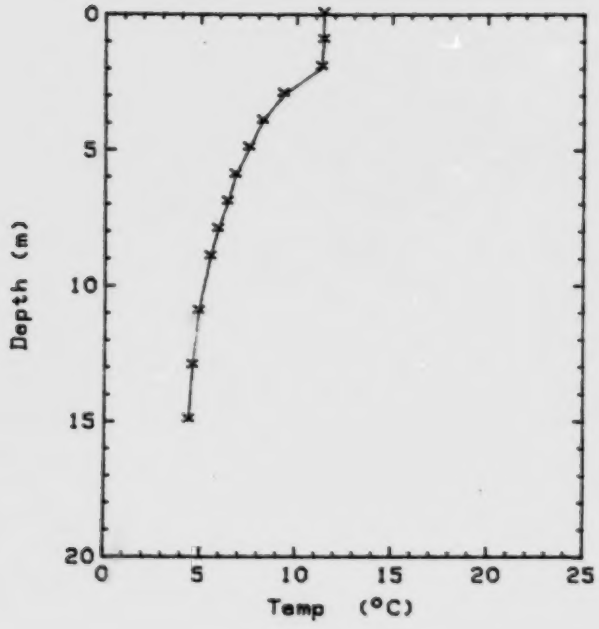
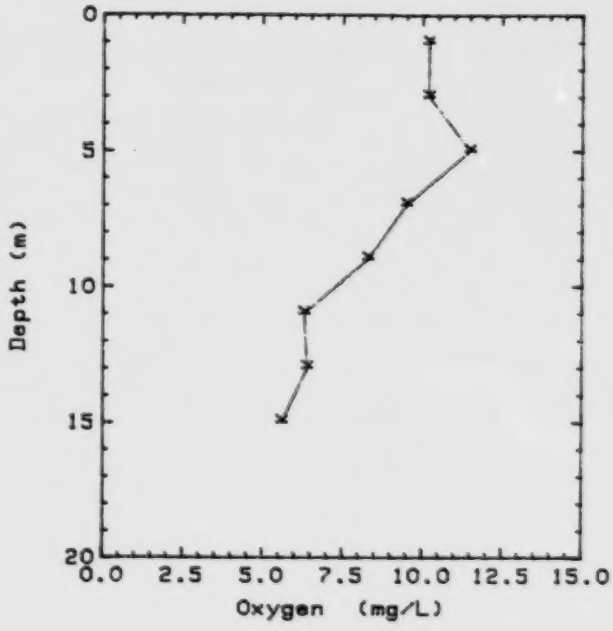
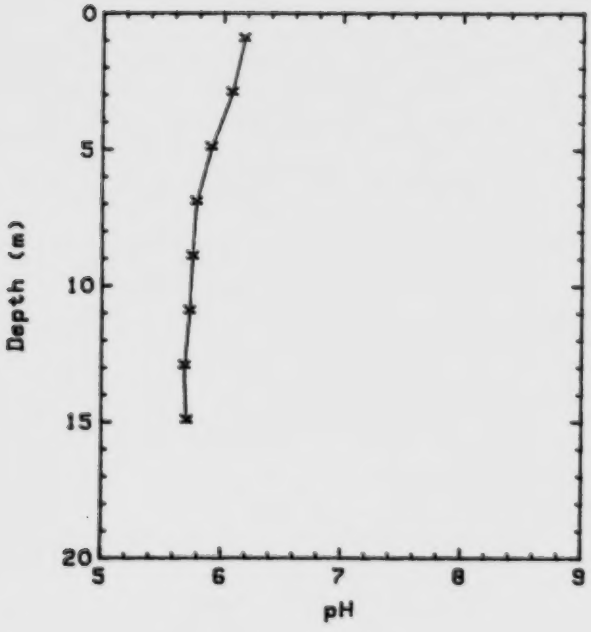



Table 45 con't

# DELANO LAKE 83.05.16



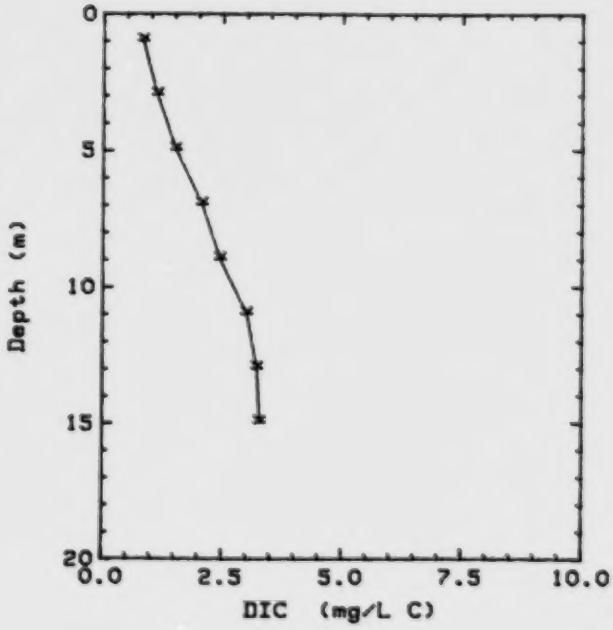
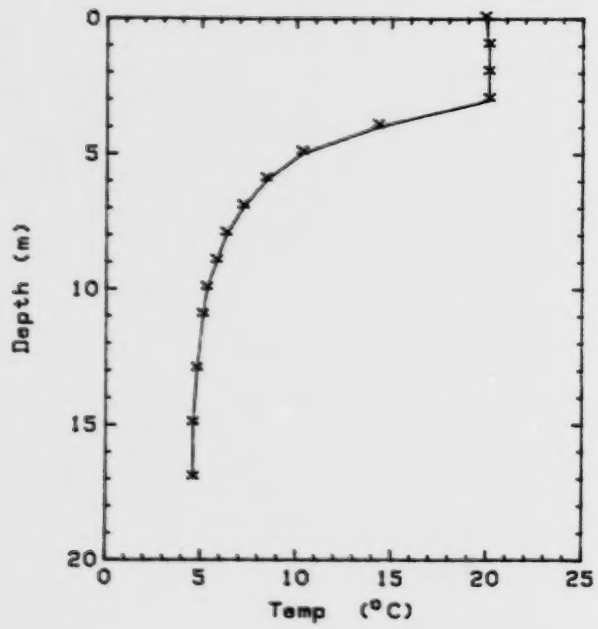
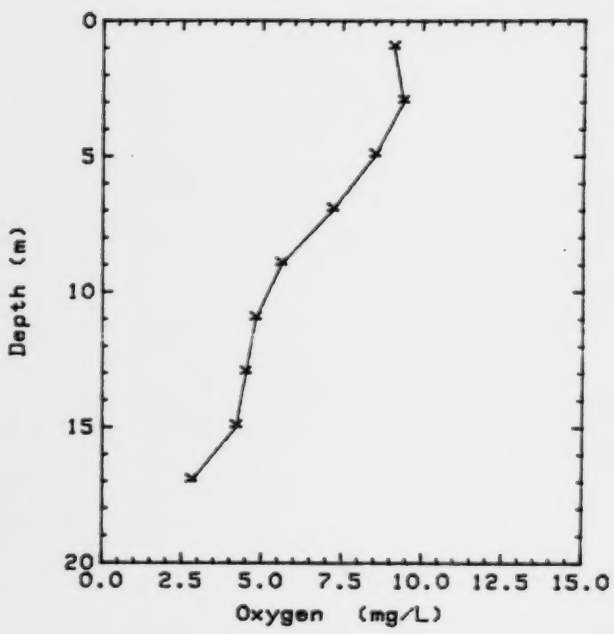
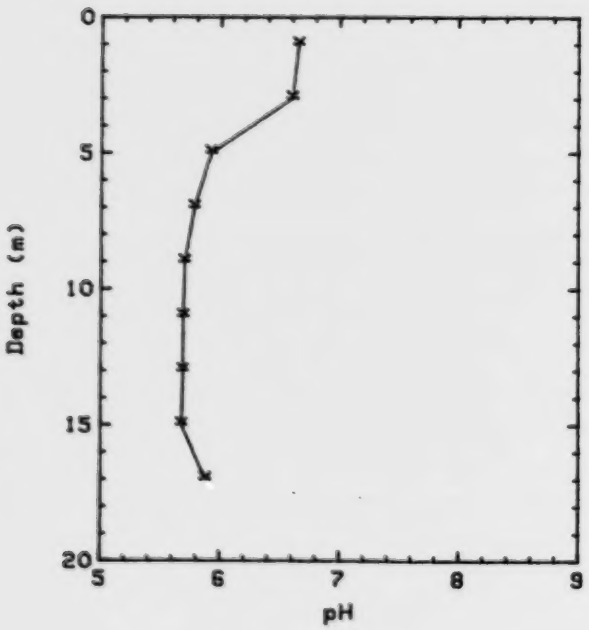



Table 45 con't

# DELANO LAKE 83.07.11



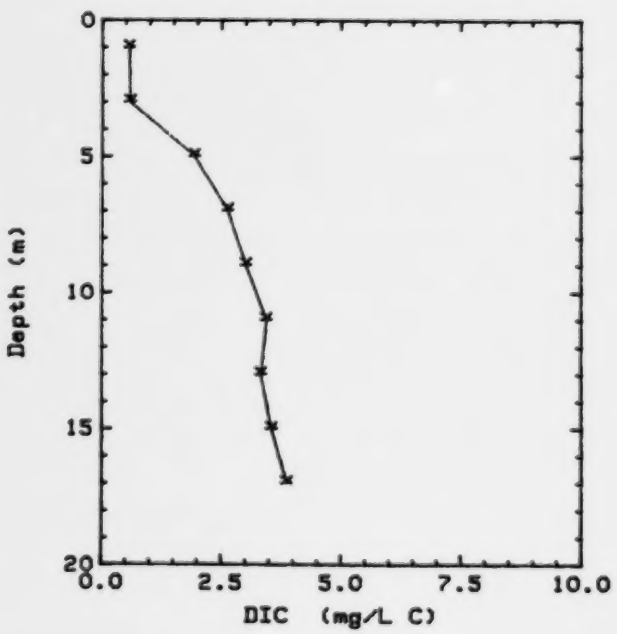
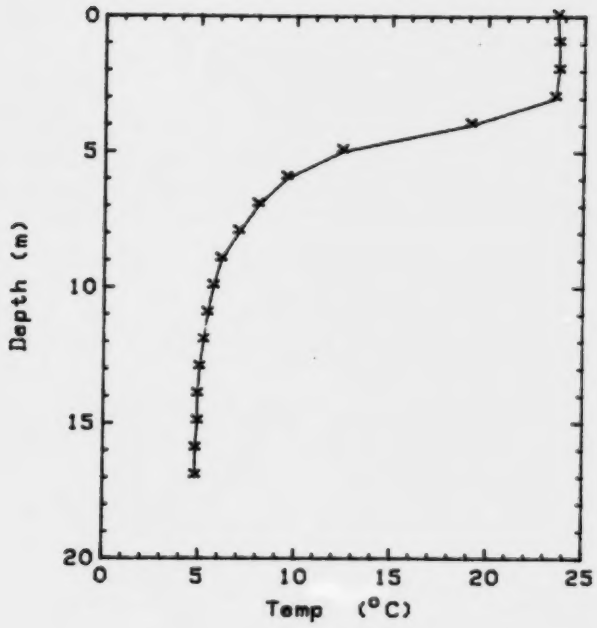
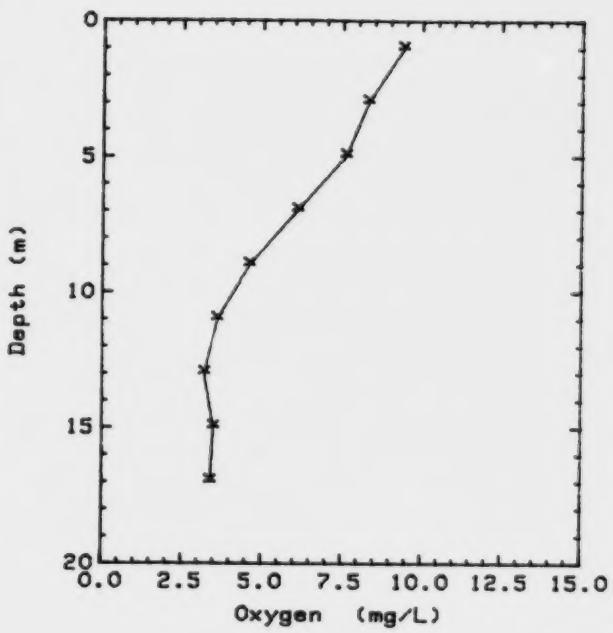
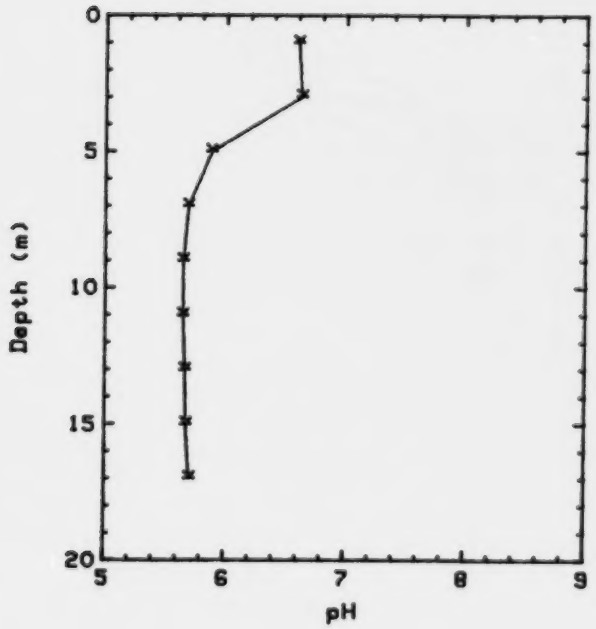



Table 45 con't

# DELANO LAKE 83.08.08



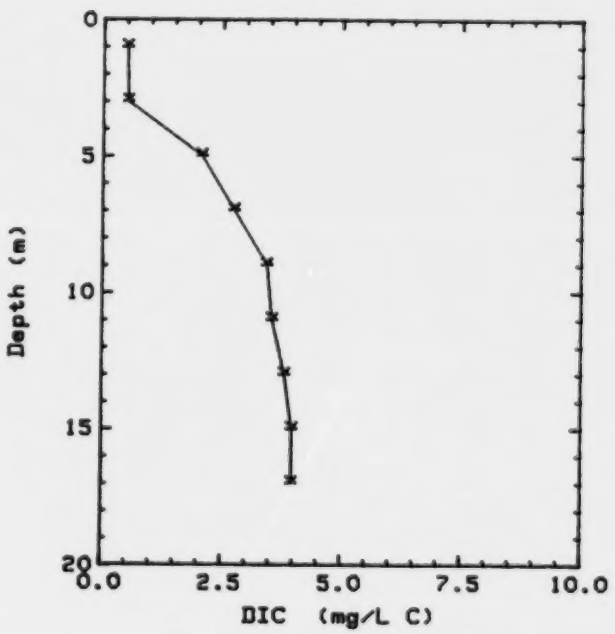
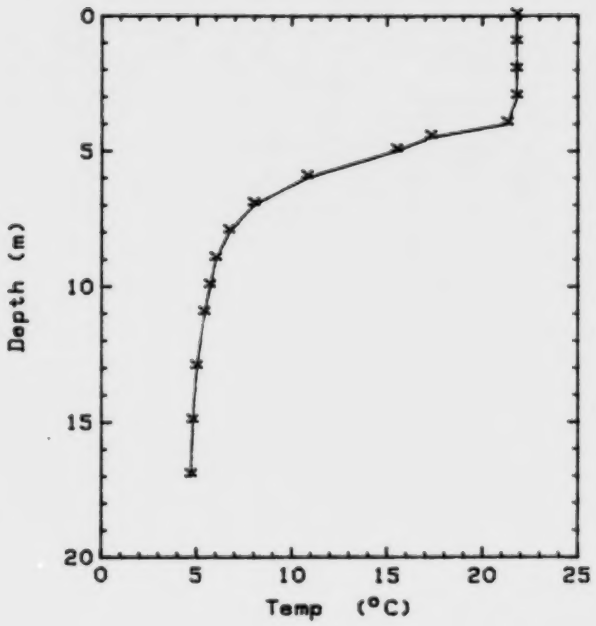
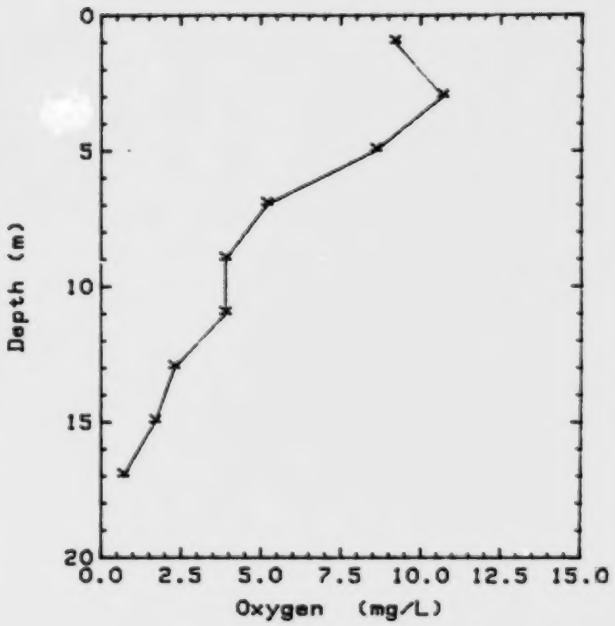



Table 45 con't

DELANO LAKE 83.09.07



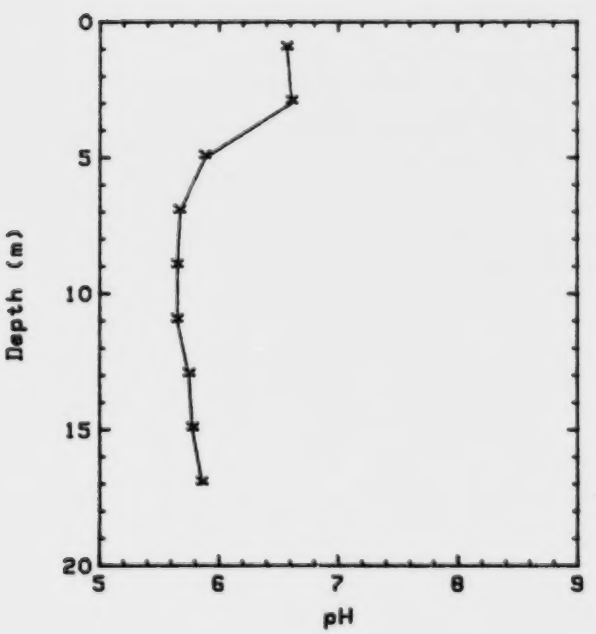
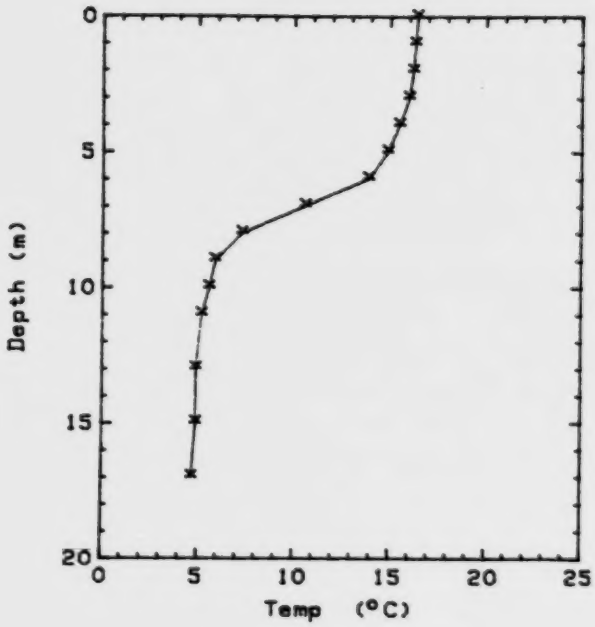
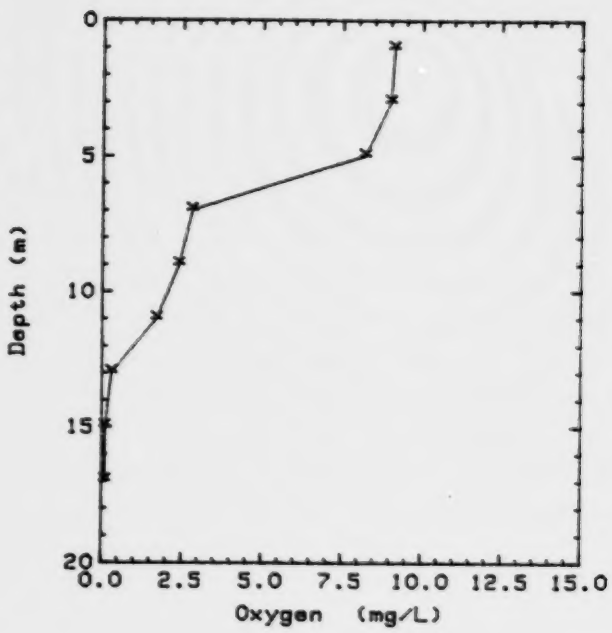
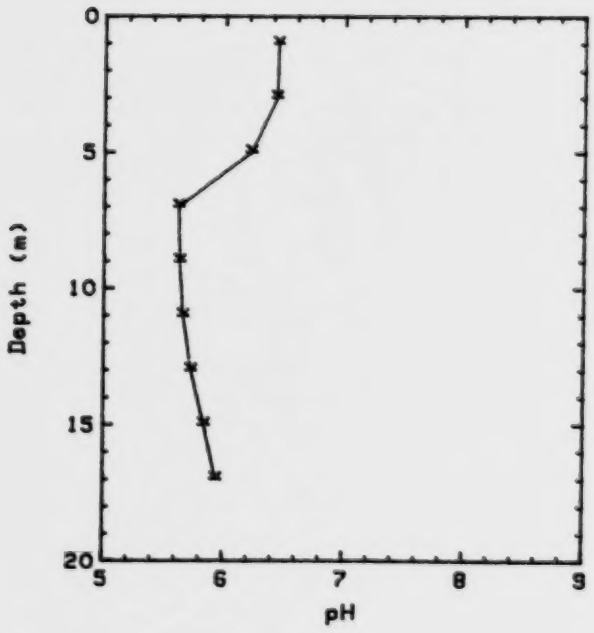



Table 45 con't

# DELANO LAKE 83.10.03



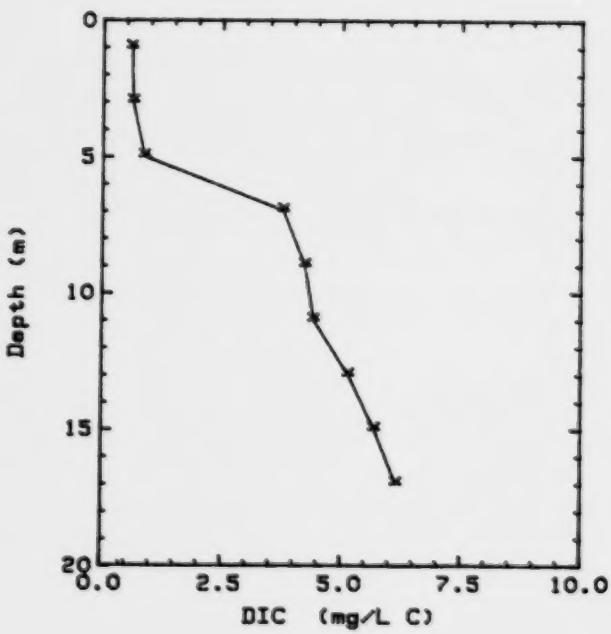
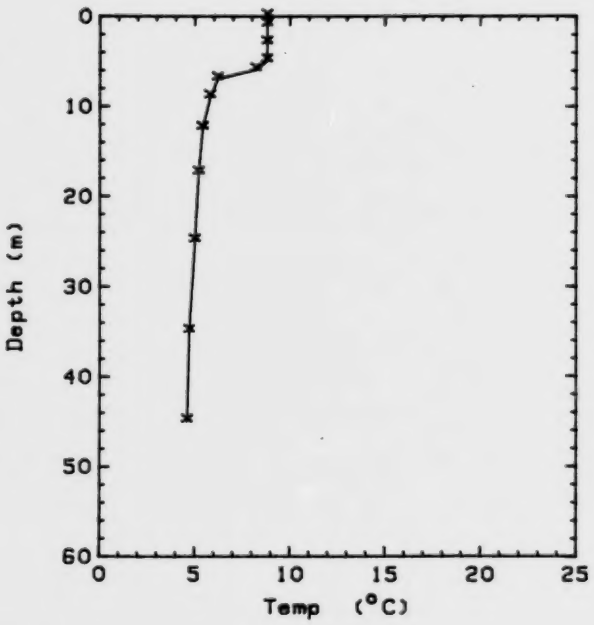
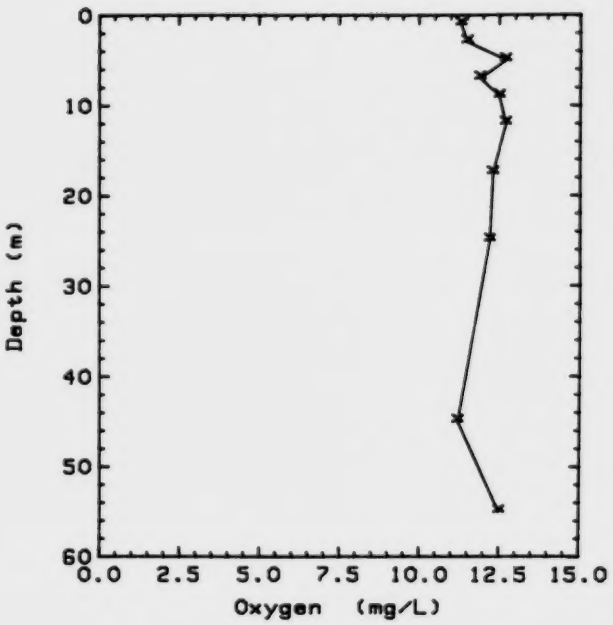



Table 46 Kimball Lake

KIMBALL LAKE 83.05.17



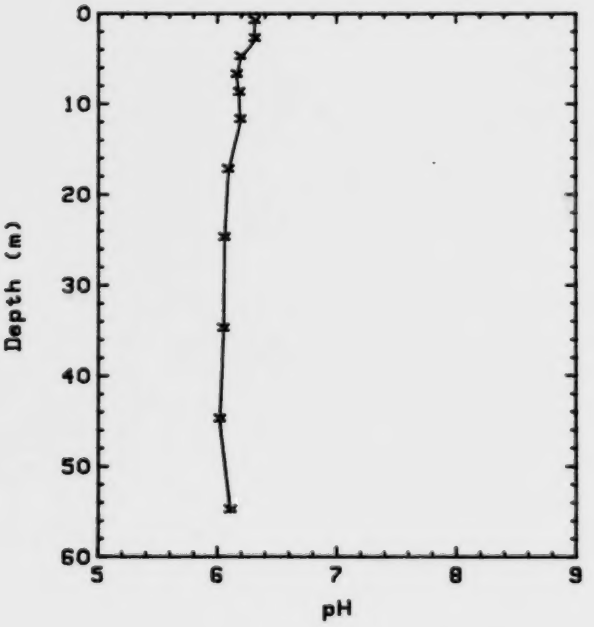
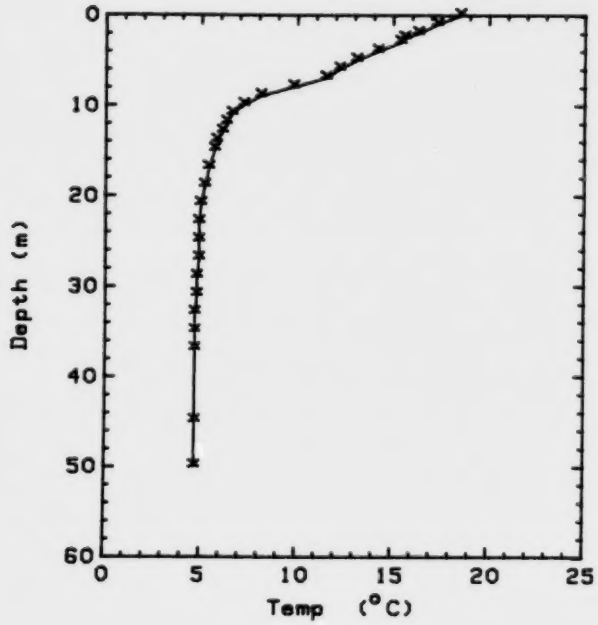
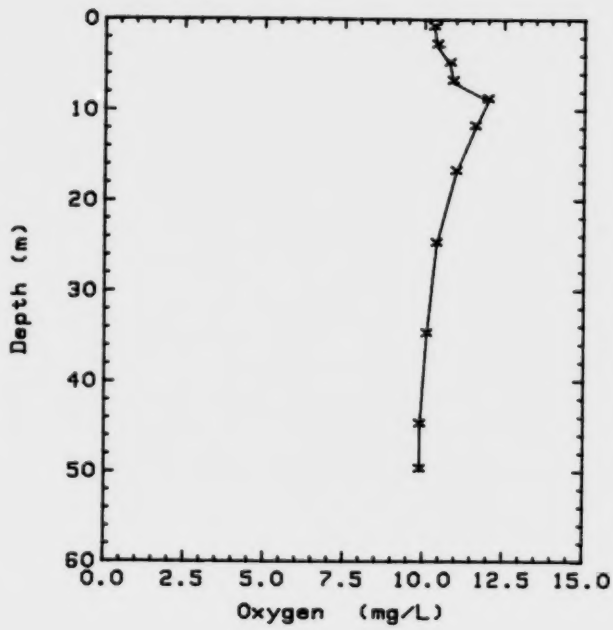



Table 46 con't

KIMBALL LAKE 83.06.13



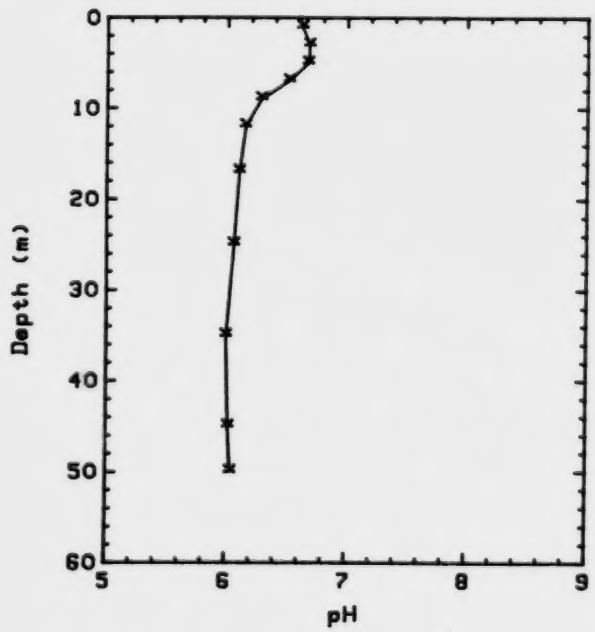
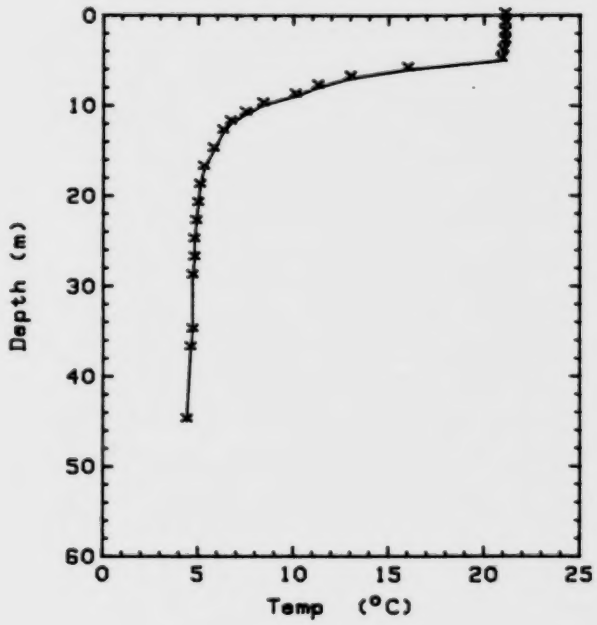
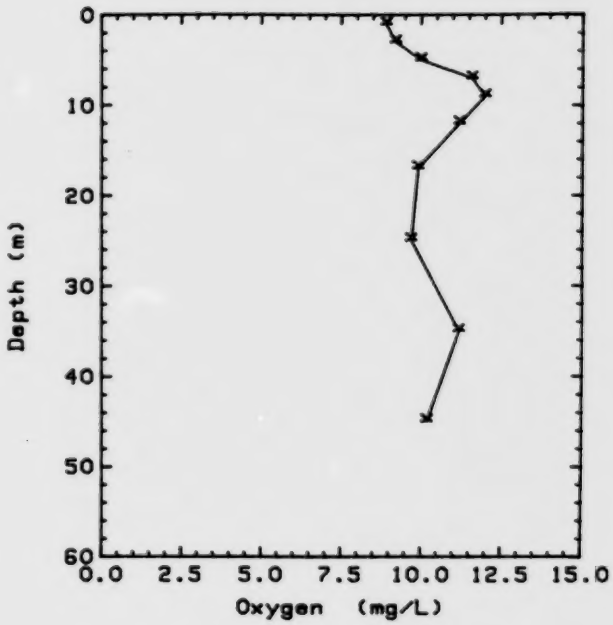



Table 46 con't

KIMBALL LAKE 83.07.13



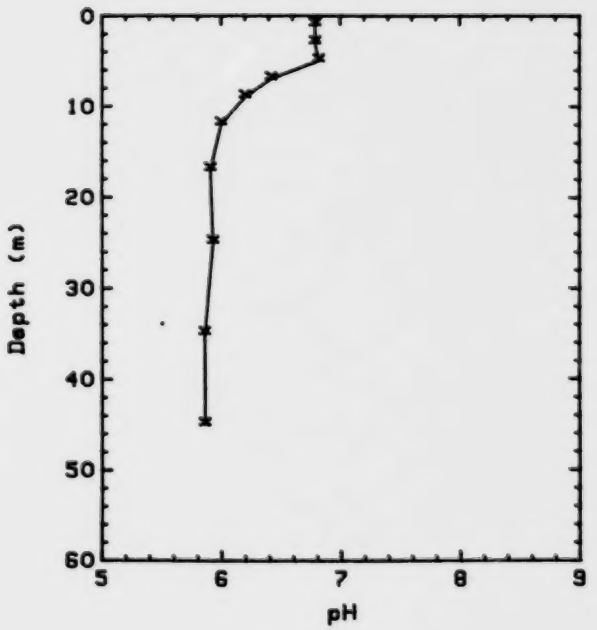
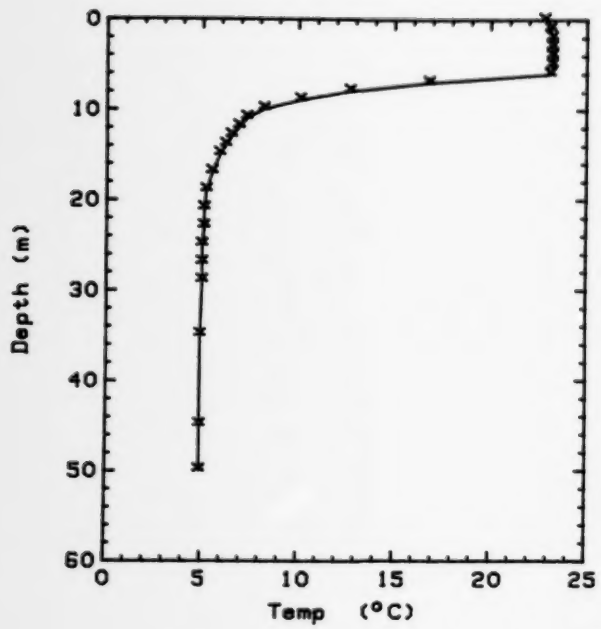
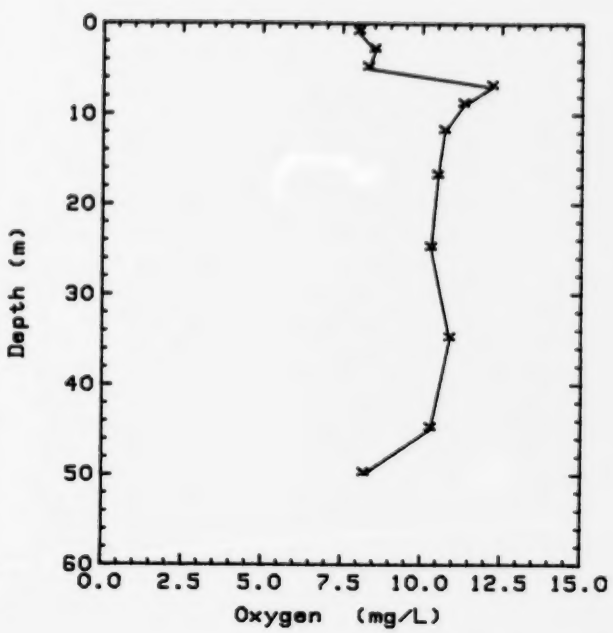



Table 46 con't

# KIMBALL LAKE 83.08.09



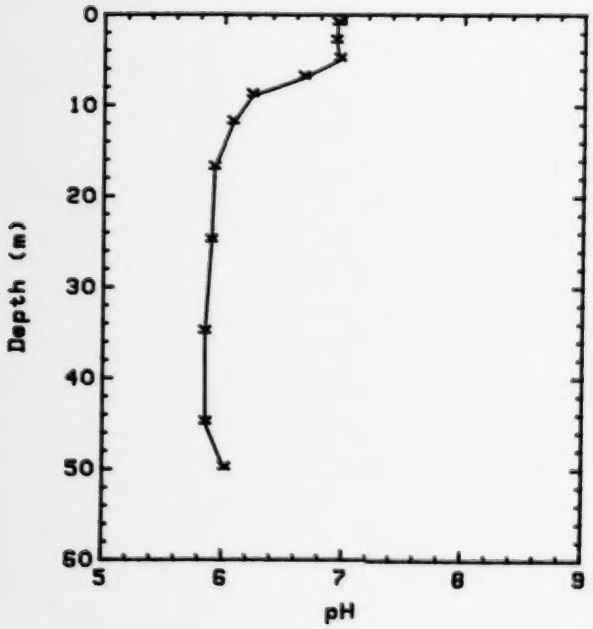
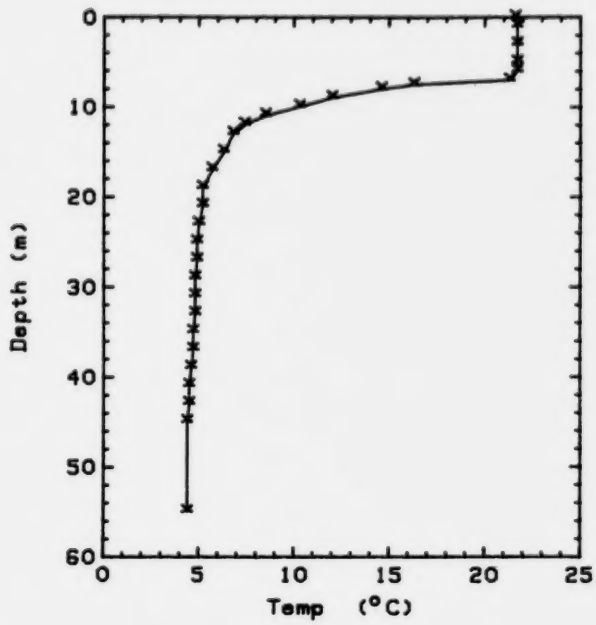
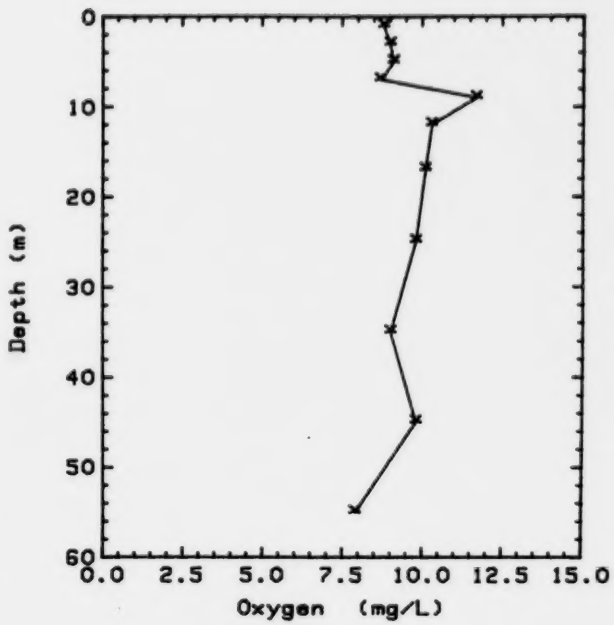



Table 46 con't

# KIMBALL LAKE 83.09.08



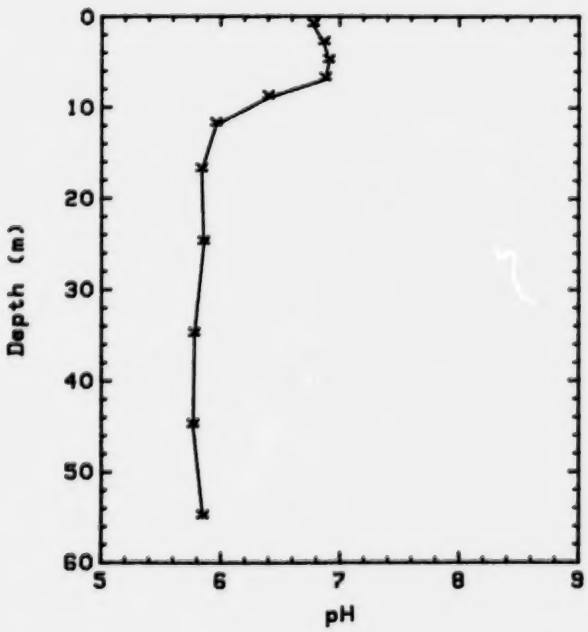
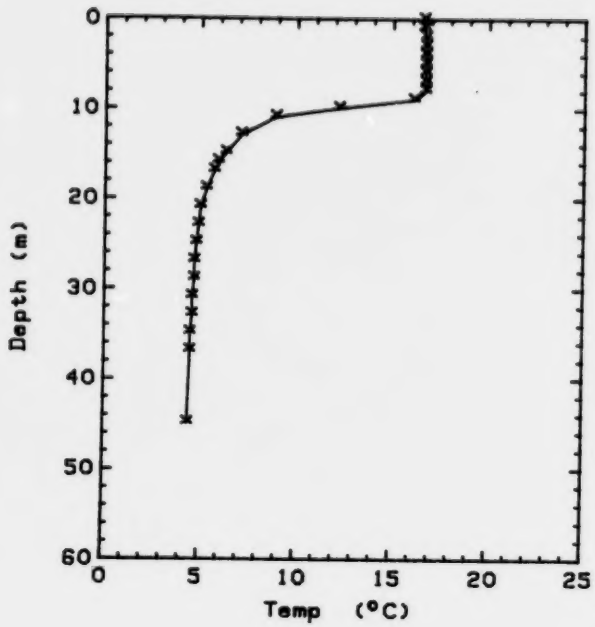
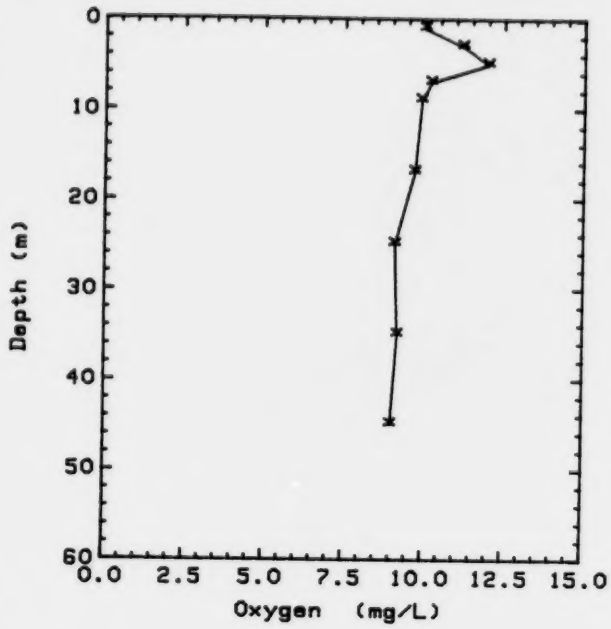



Table 46 con't

# KIMBALL LAKE 83.10.04



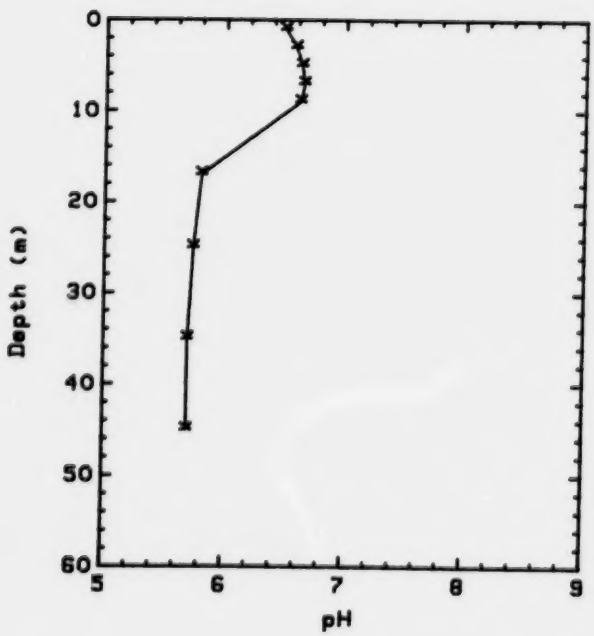
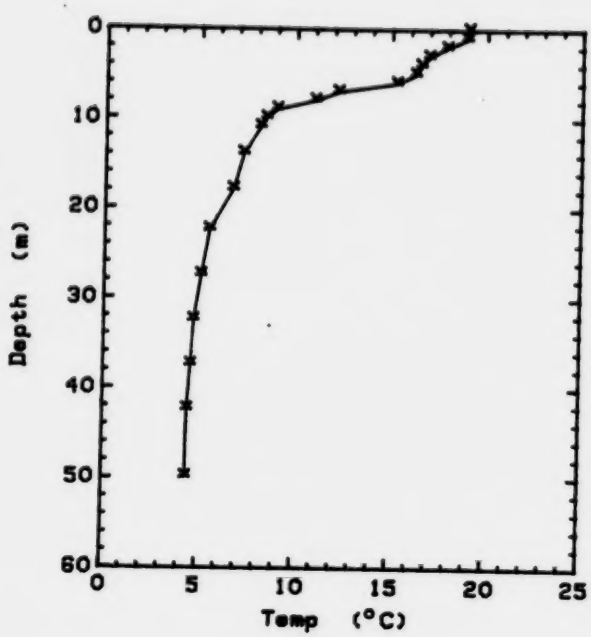
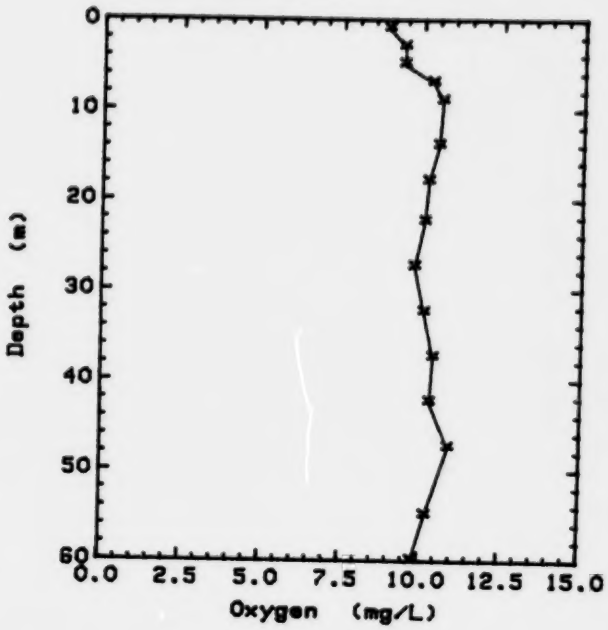
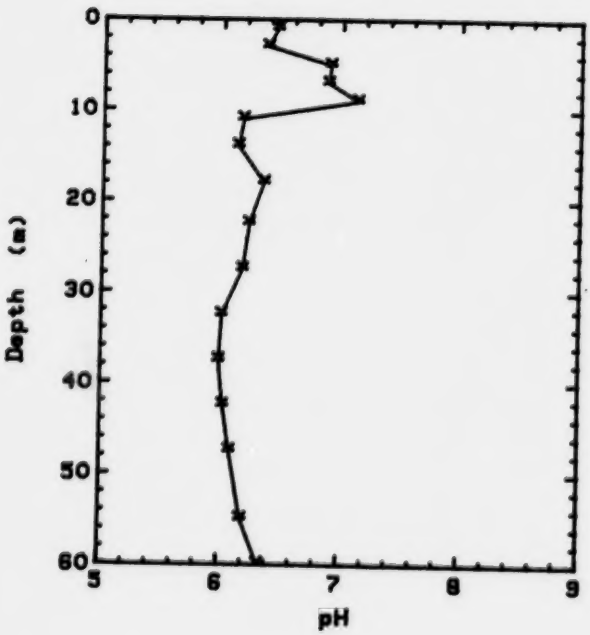



Table 47 Lake Louisa

# LAKE LOUISA 81.06.15



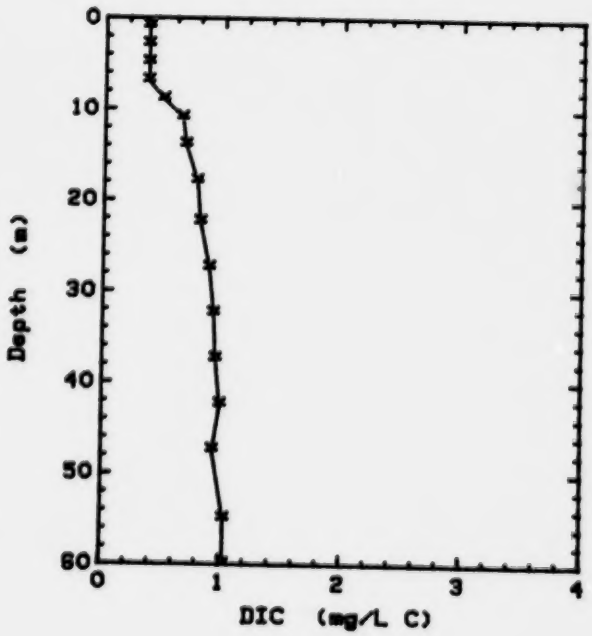
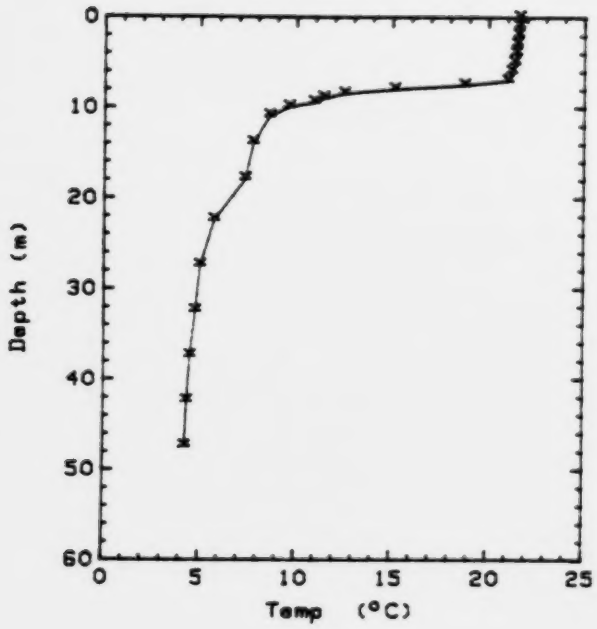
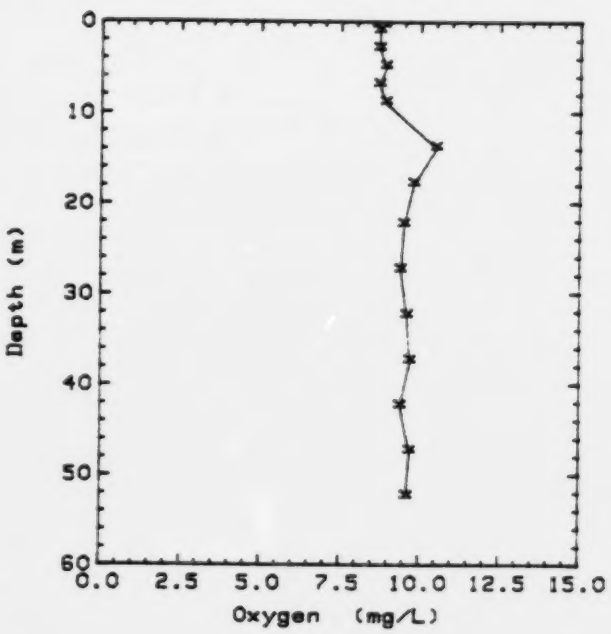



Table 47 con't

# LAKE LOUISA 81.08.05



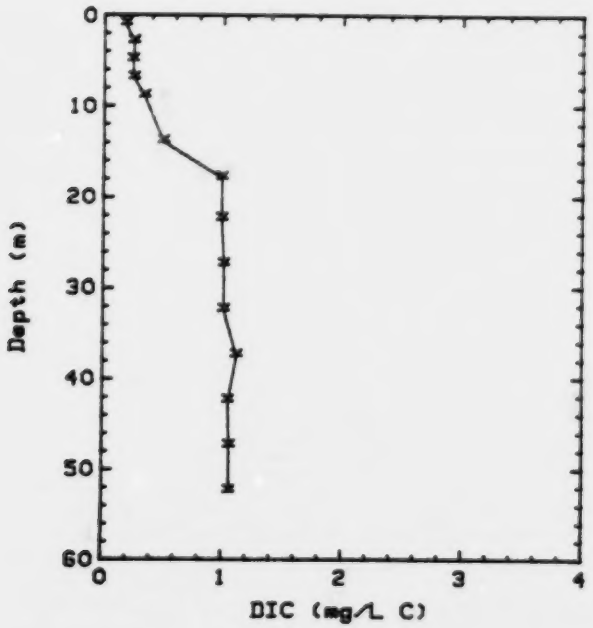
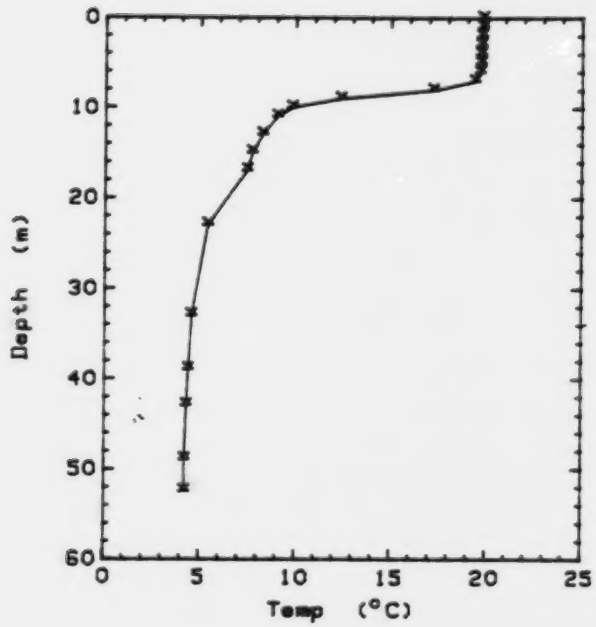
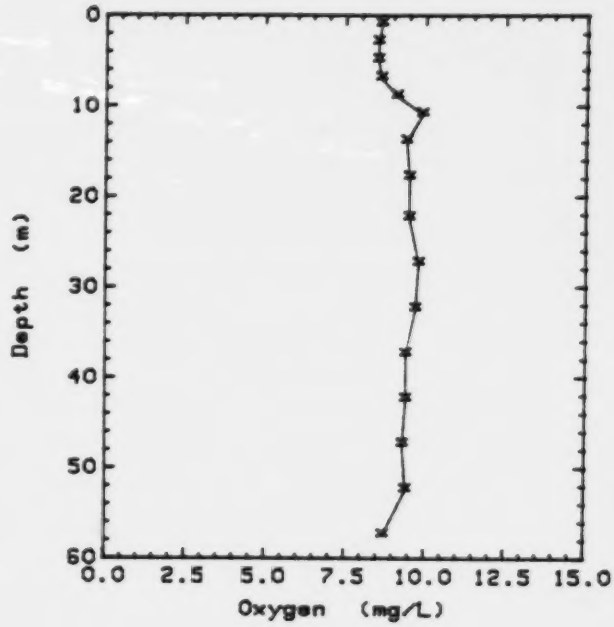



Table 47 con't

# LAKE LOUISA 81.08.19



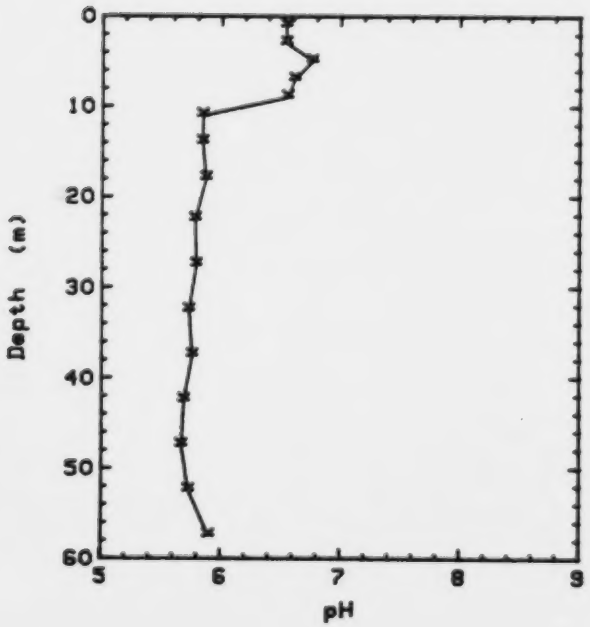
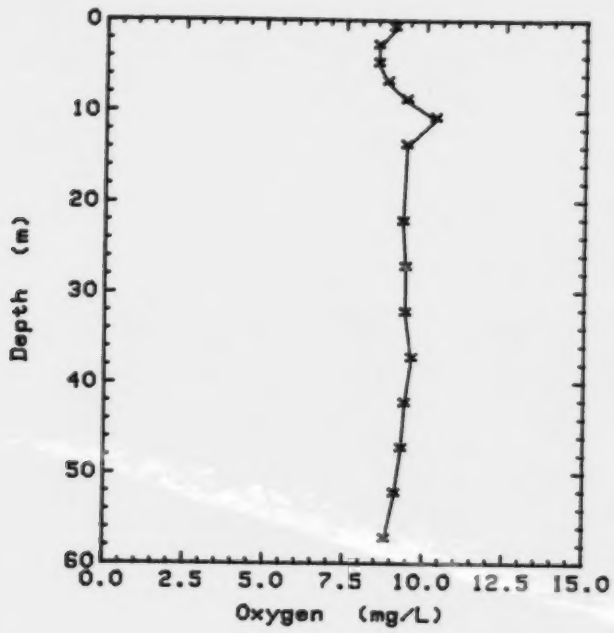
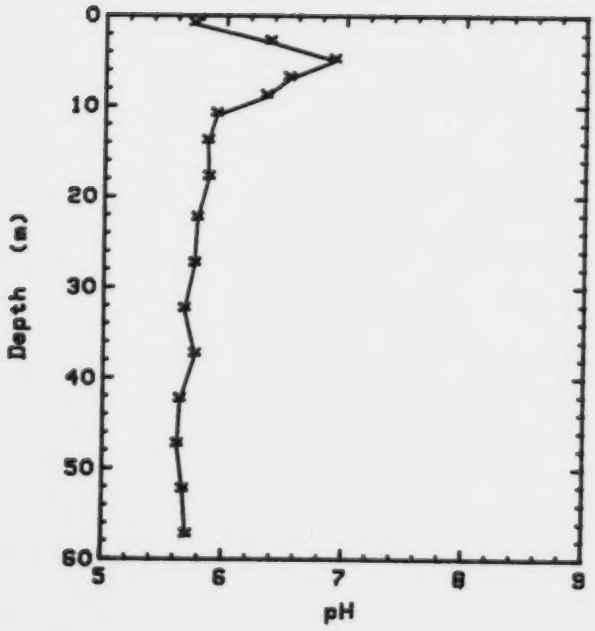



Table 47 con't

# LAKE LOUISA 81.09.01



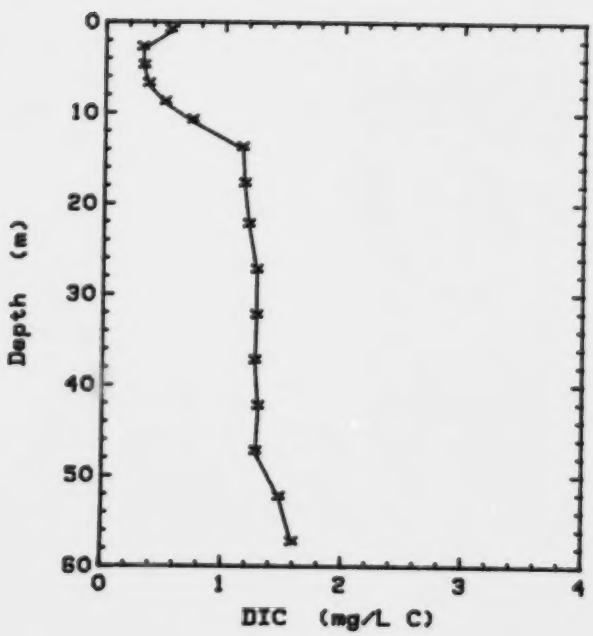
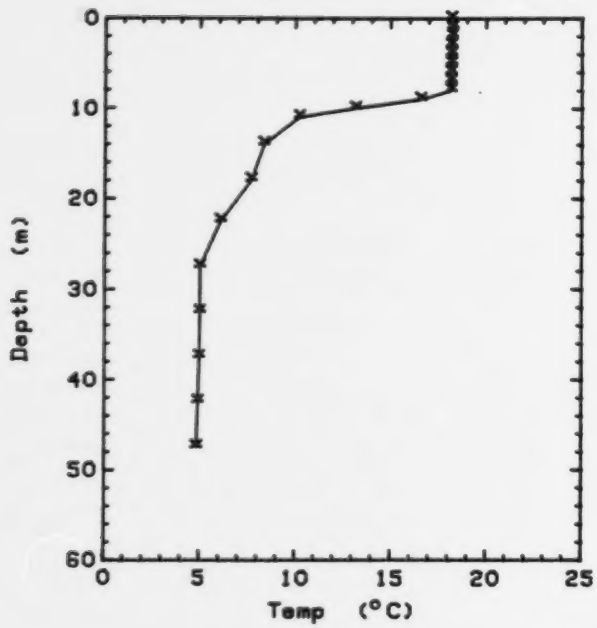
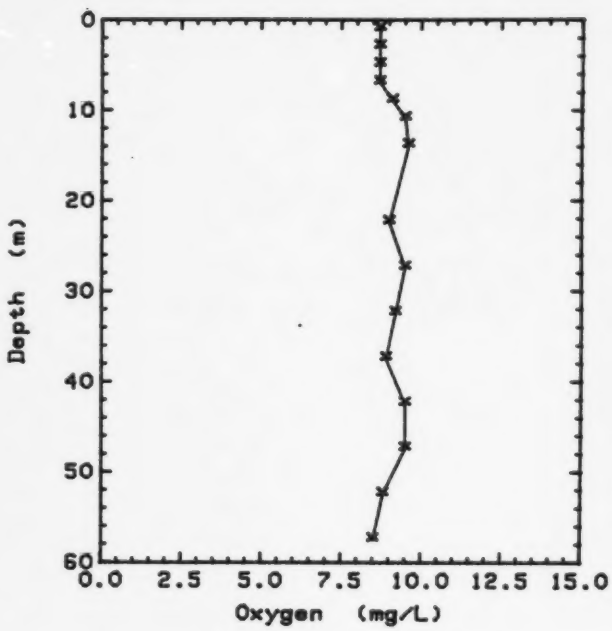
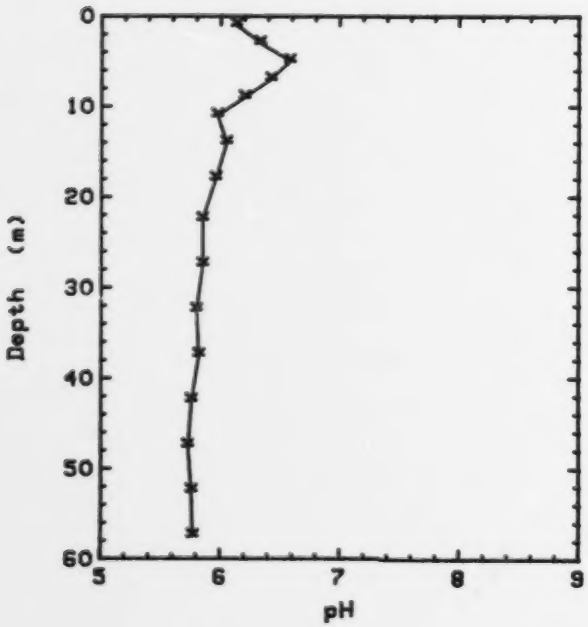



Table 47 con't

# LAKE LOUISA 81.09.15



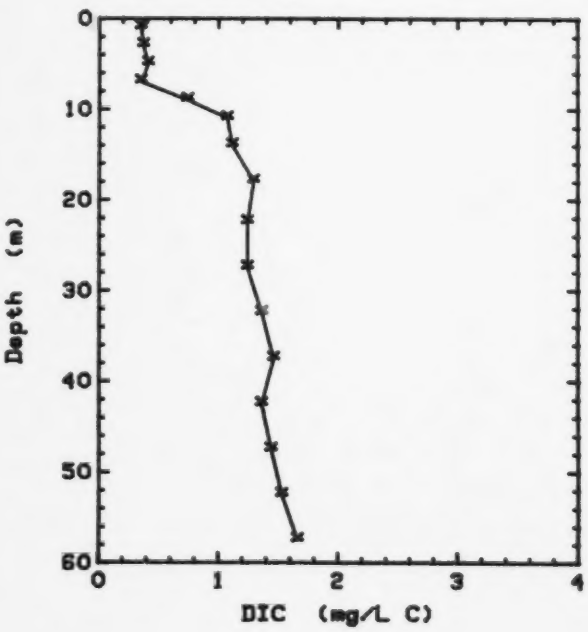
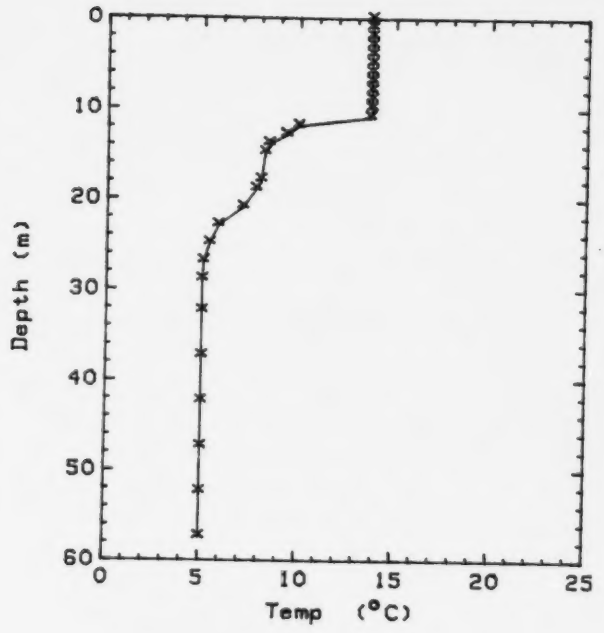
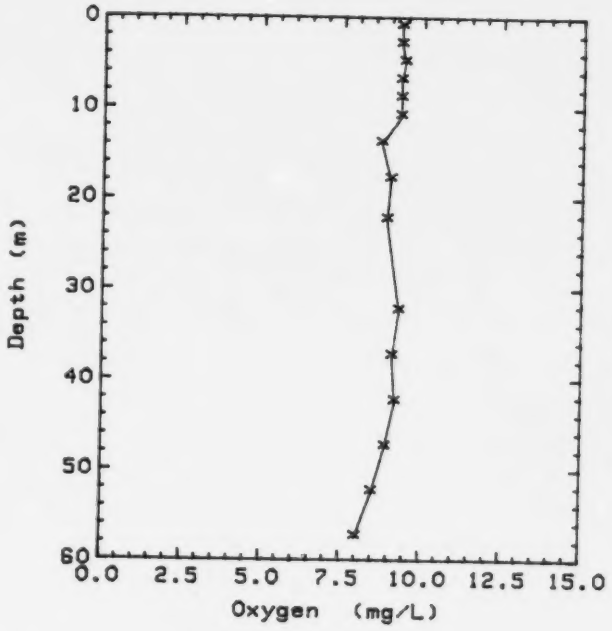
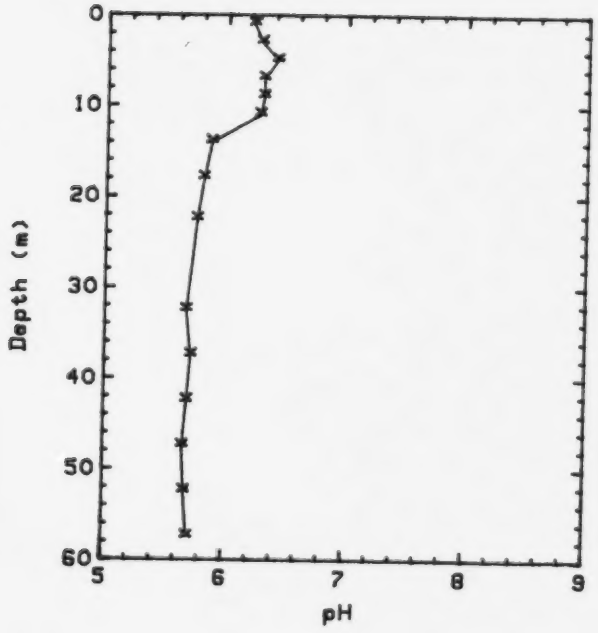



Table 47 con't

# LAKE LOUISA 81.09.29



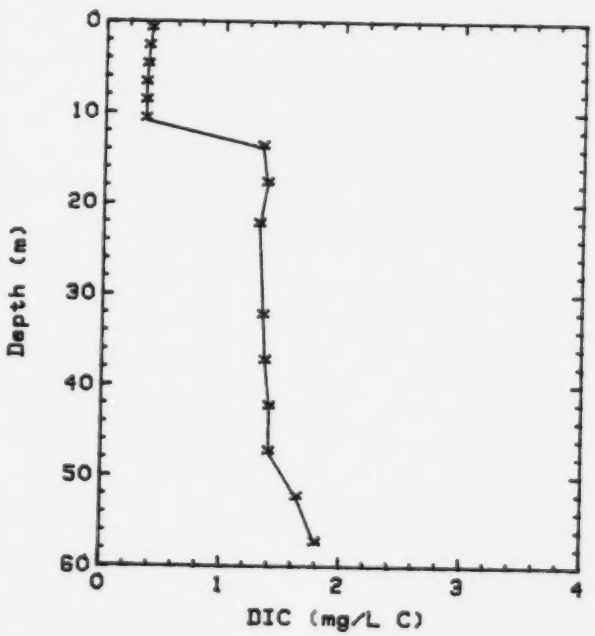
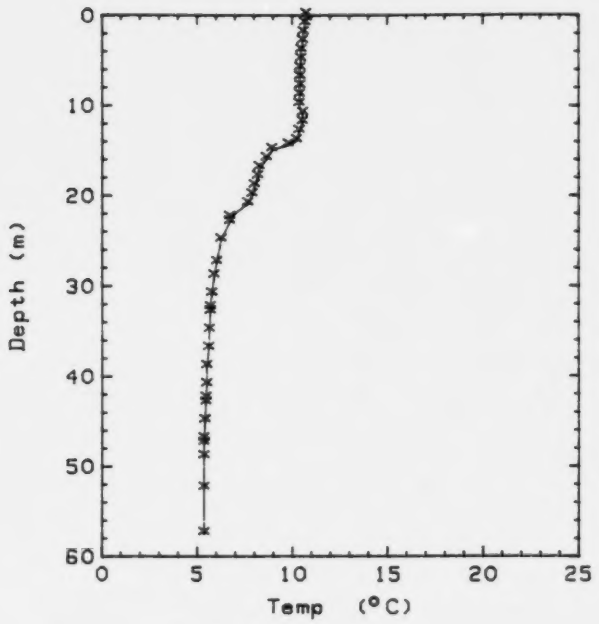
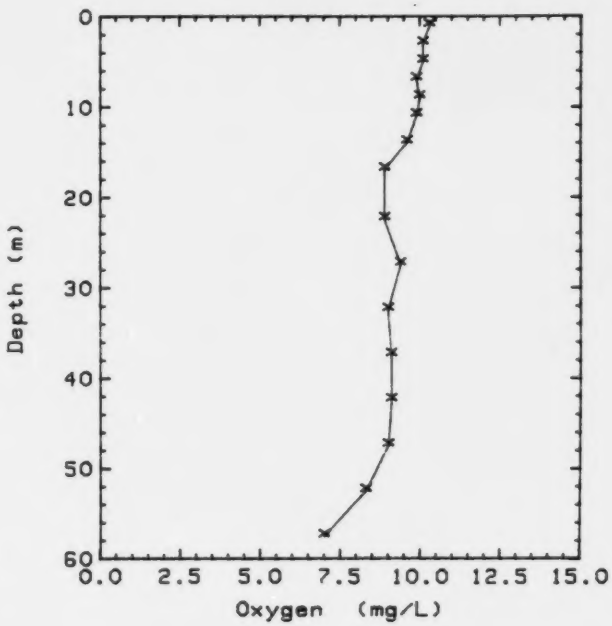
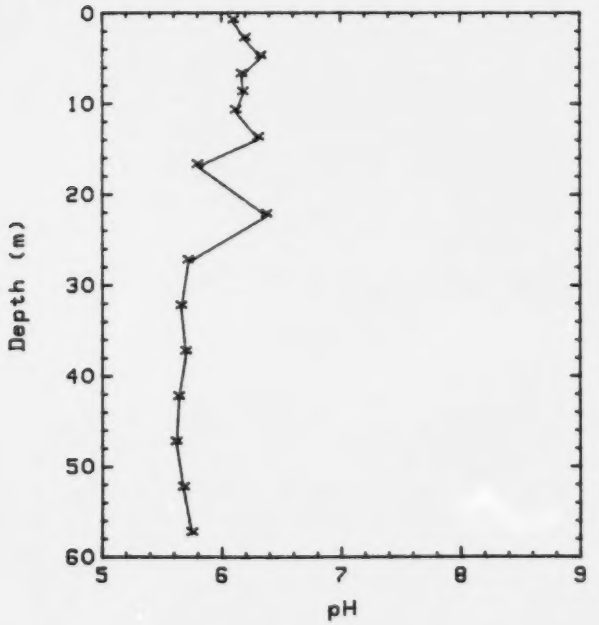



Table 47 con't

LAKE LOUISA 81.10.14



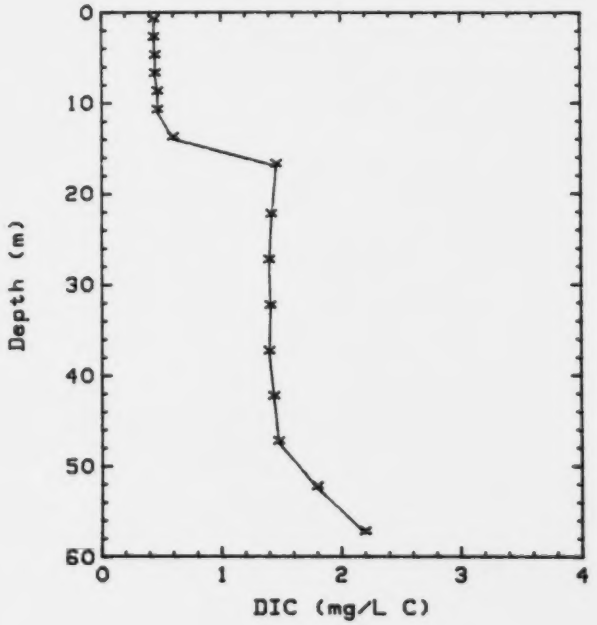
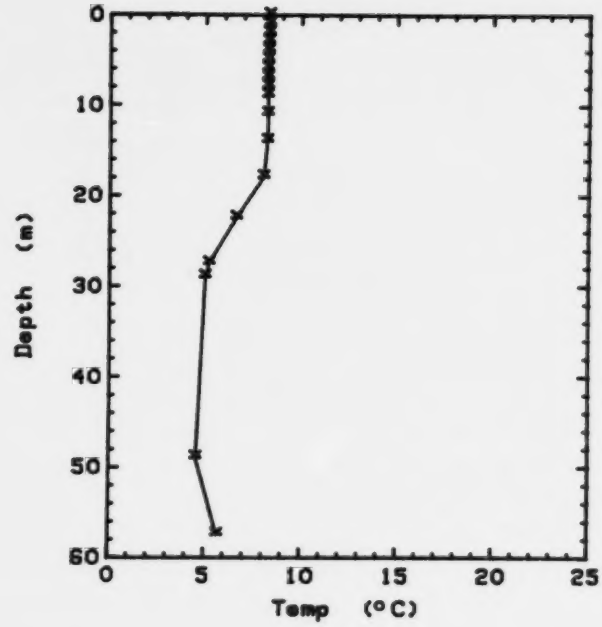
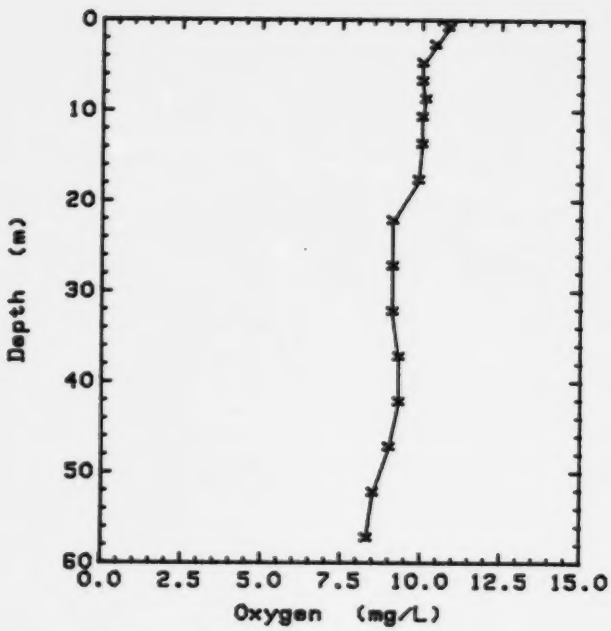
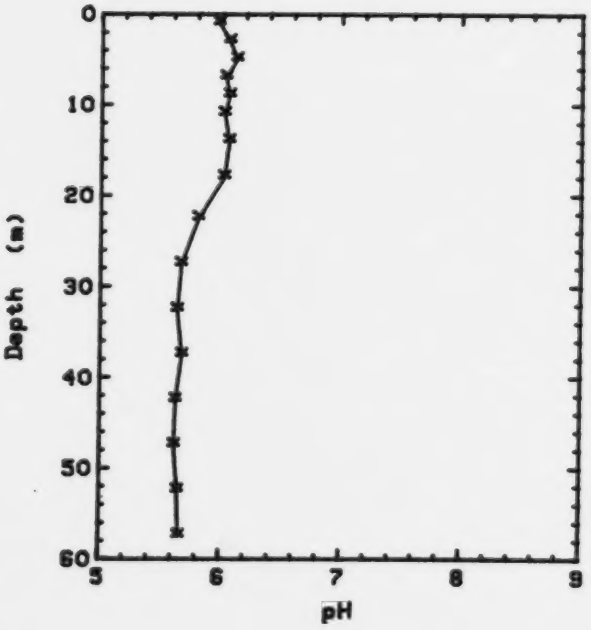



Table 47 con't

# LAKE LOUISA 81.10.26



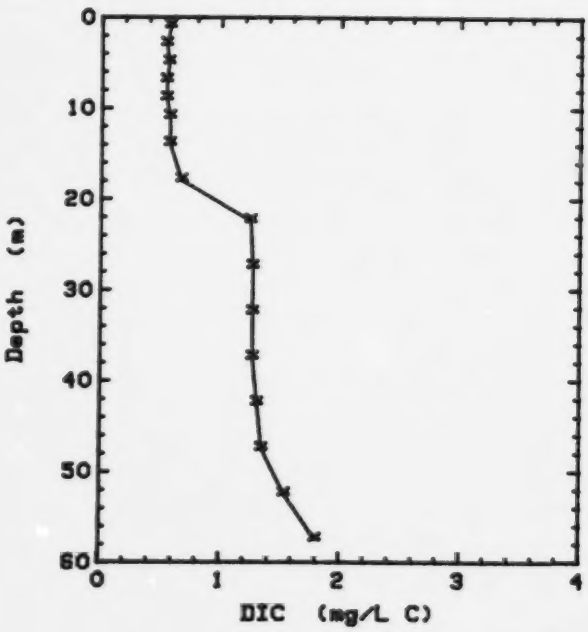
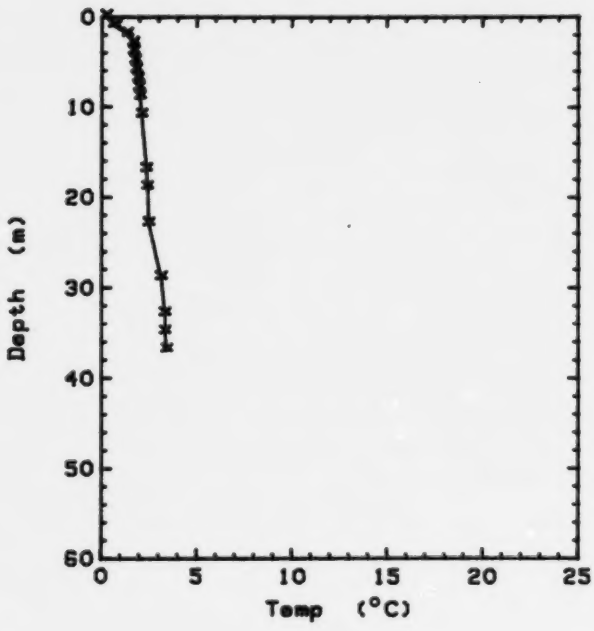
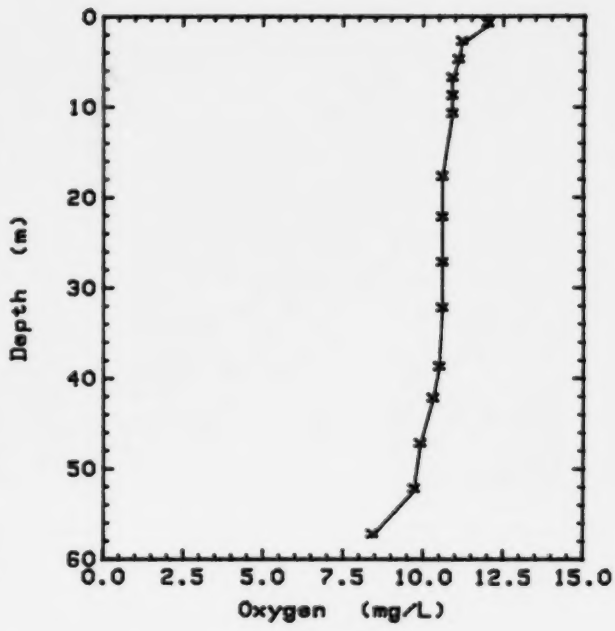
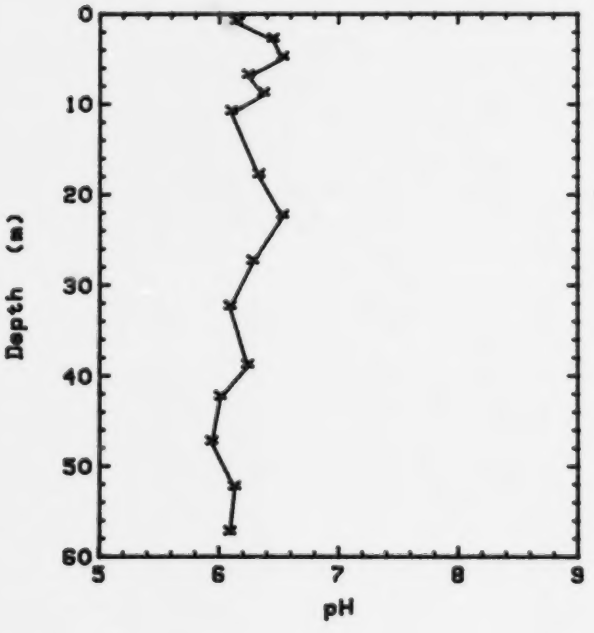



Table 47 con't

# LAKE LOUISA 82.01.26



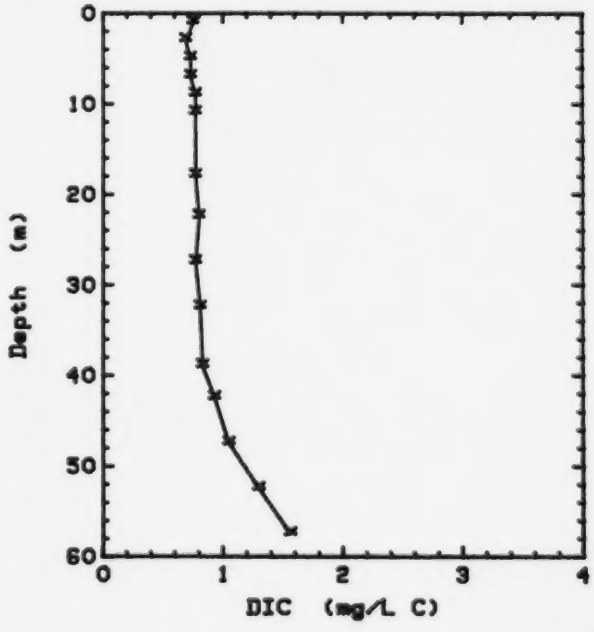
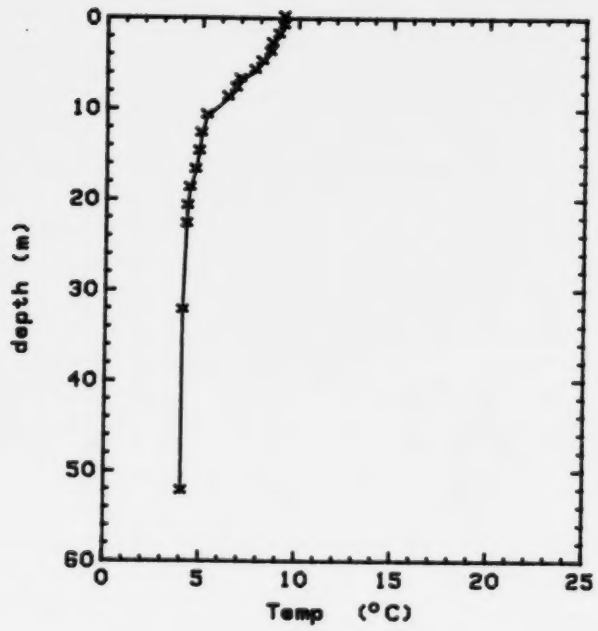
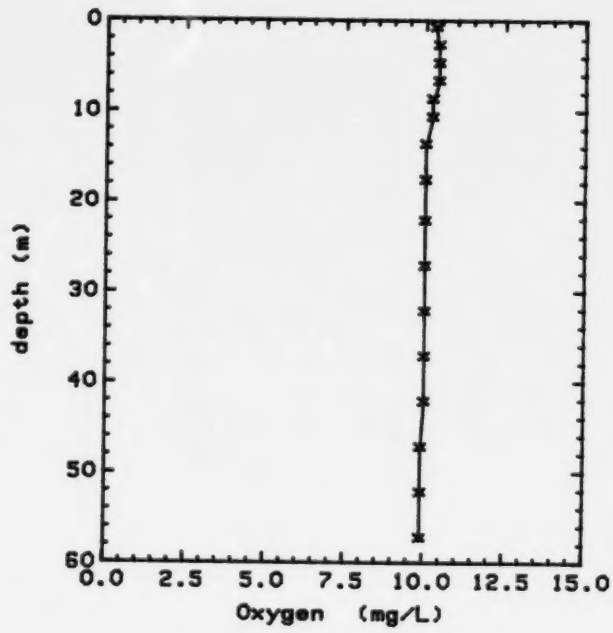
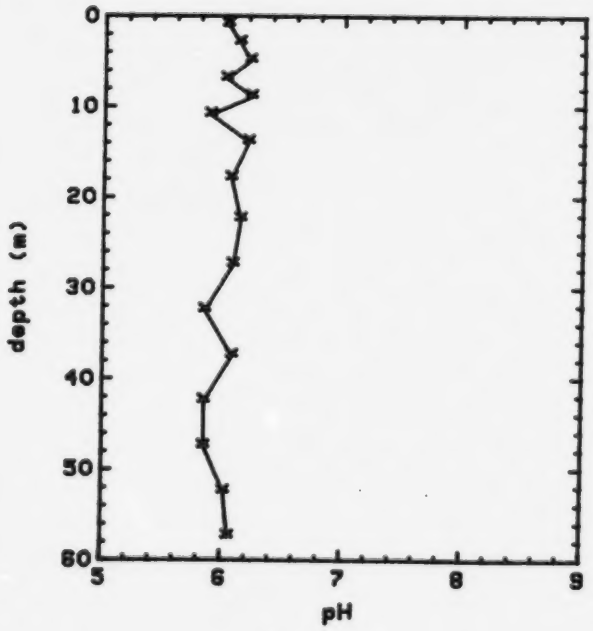



Table 47 con't

# LAKE LOUISA 82.05.11



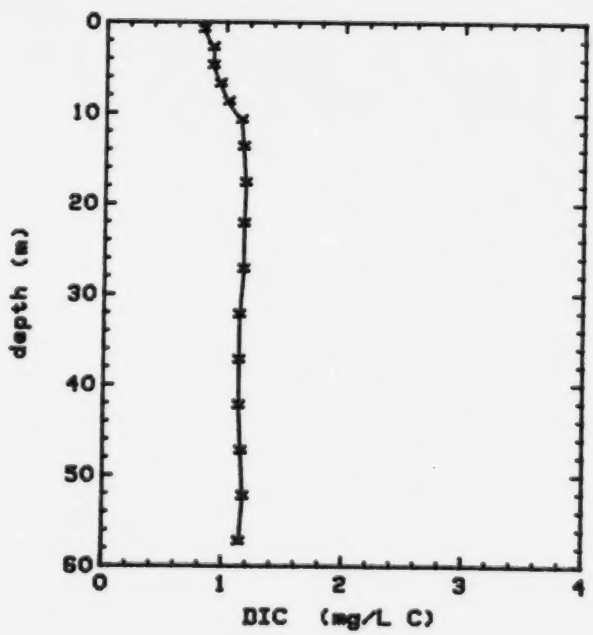
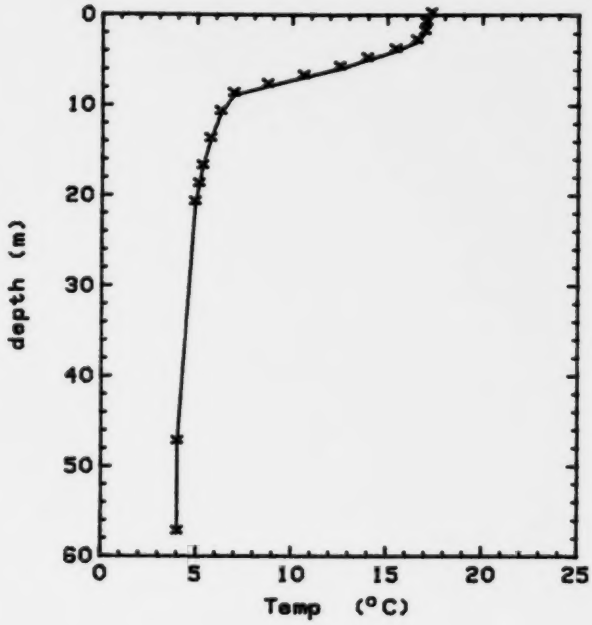
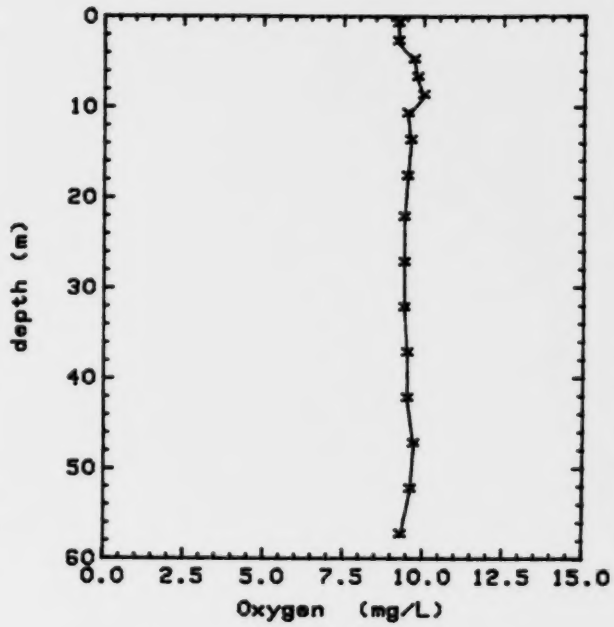
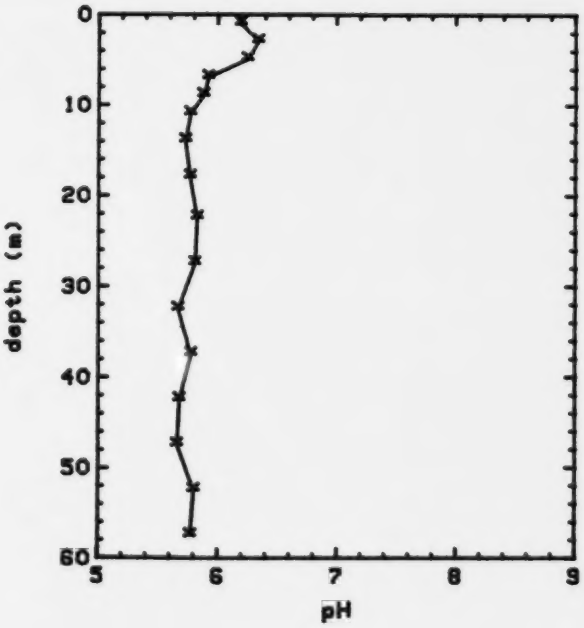



Table 47 con't

# LAKE LOUISA 82.06.09



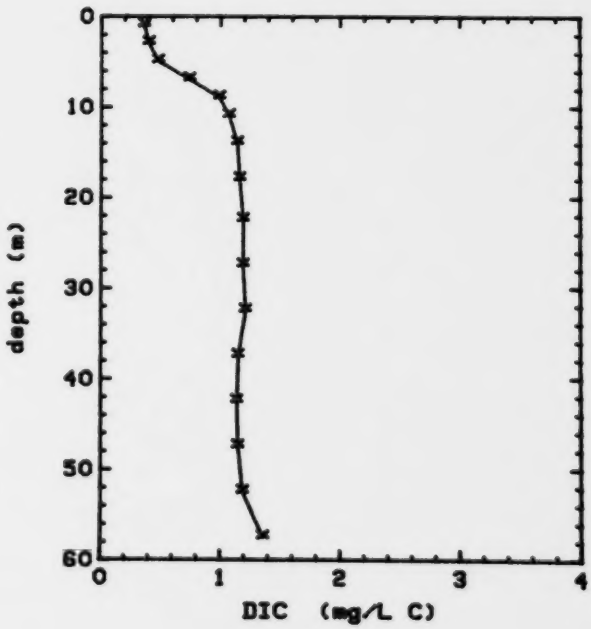
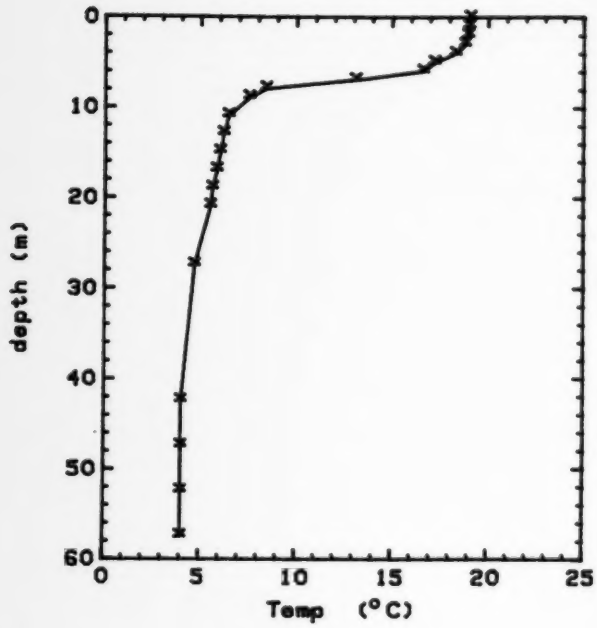
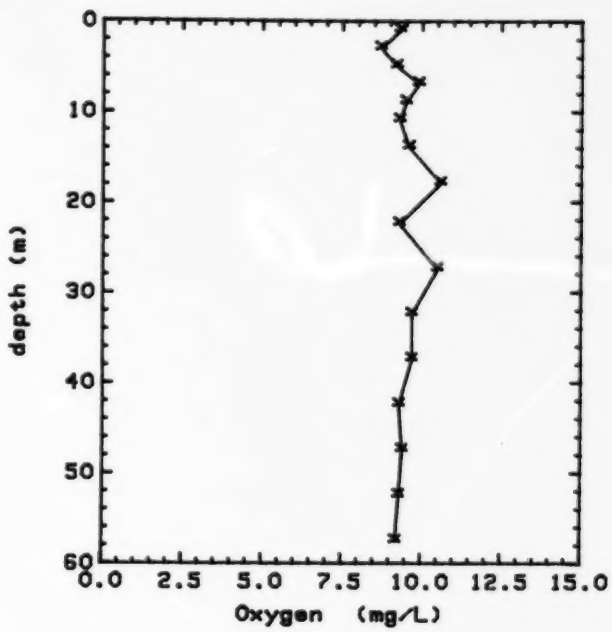
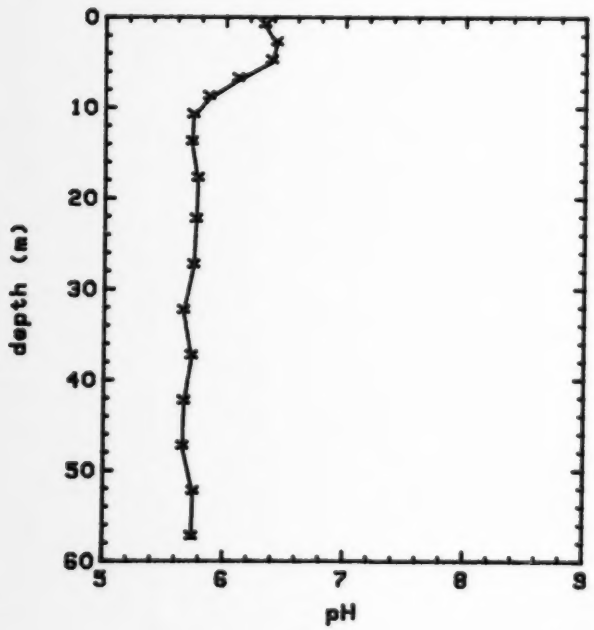



Table 47 con't

# LAKE LOUISA 82.07.06



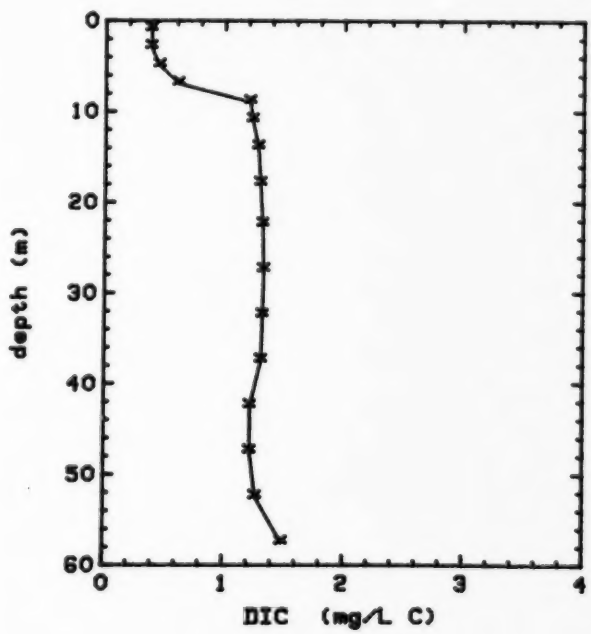
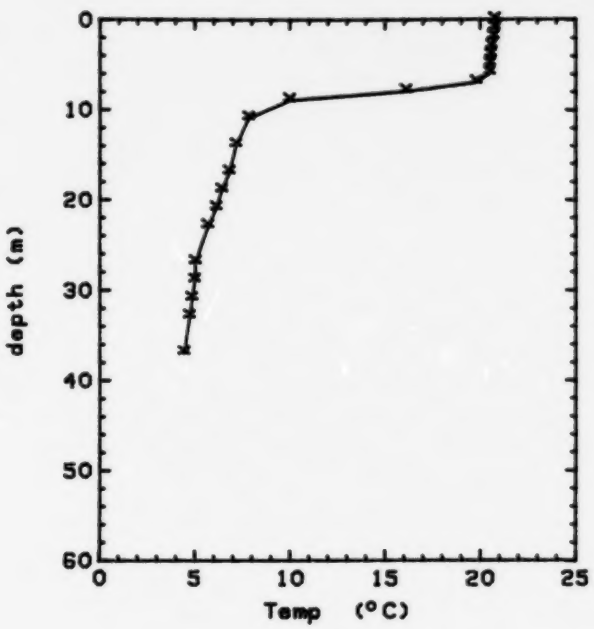
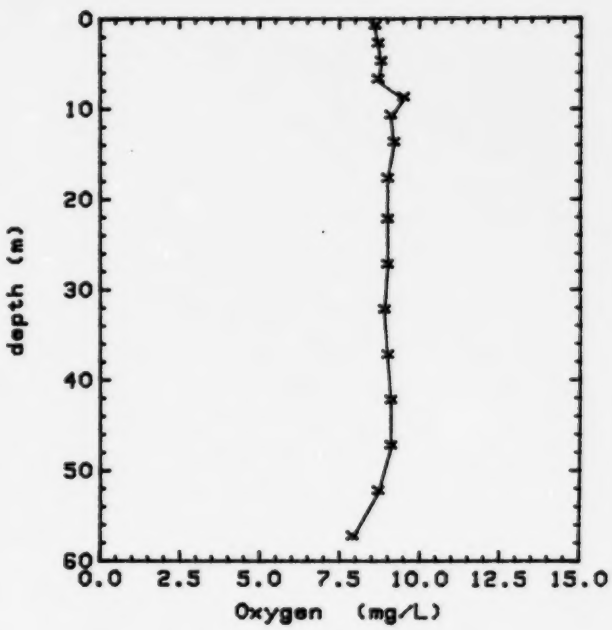
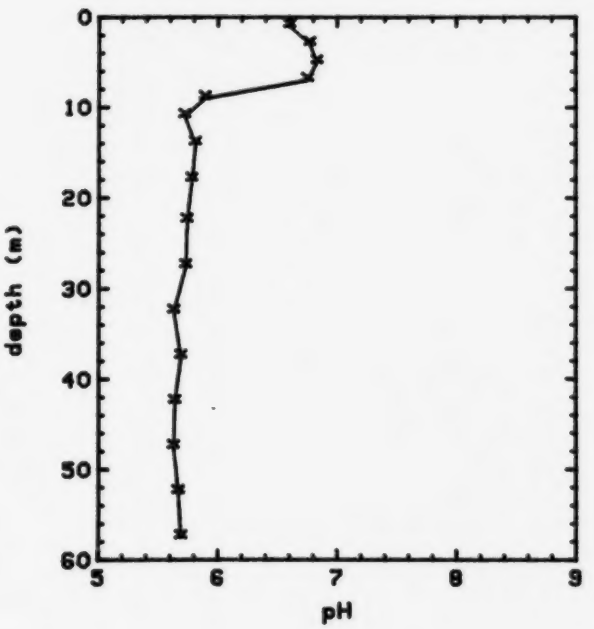



Table 47 con't

# LAKE LOUISA 82.08.05



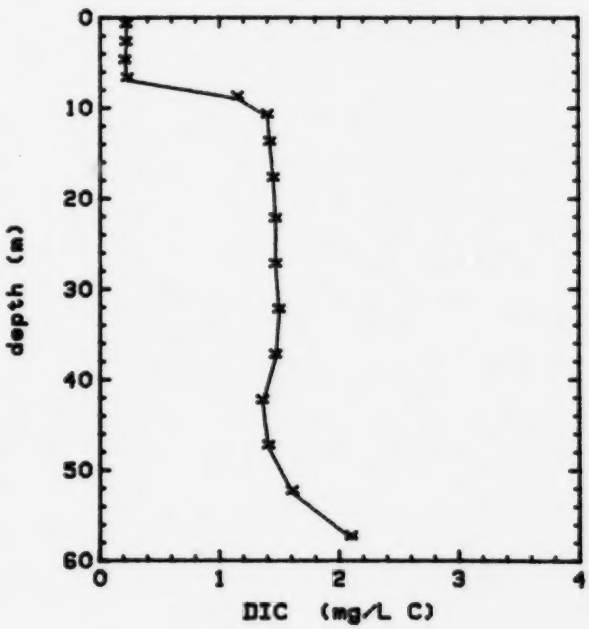
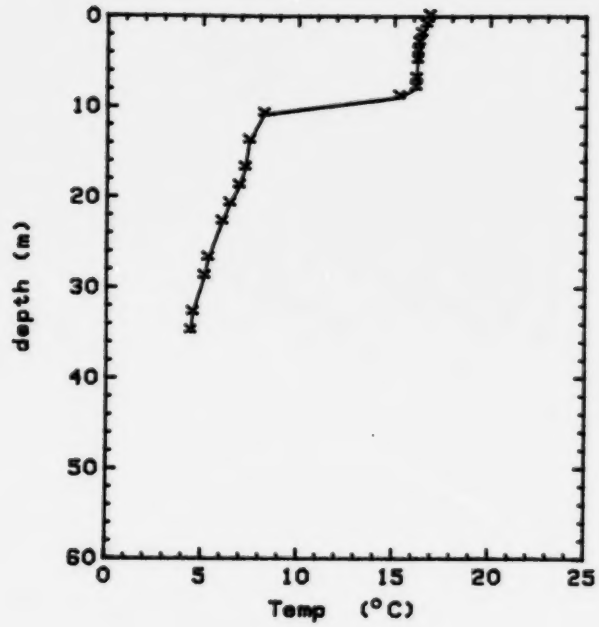
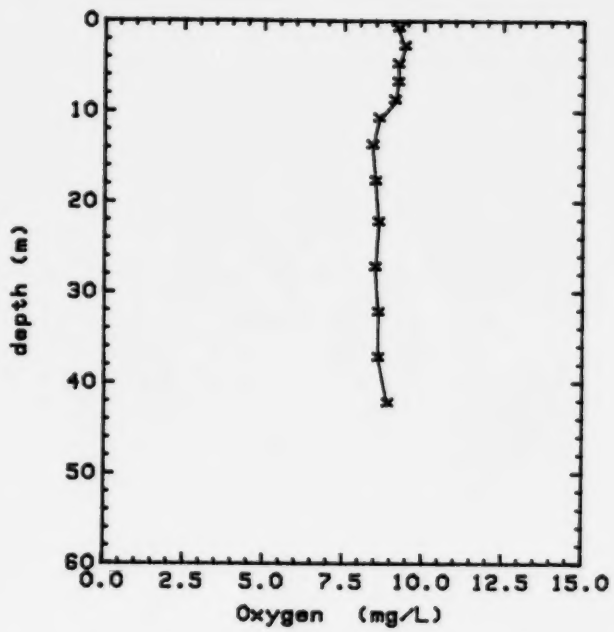
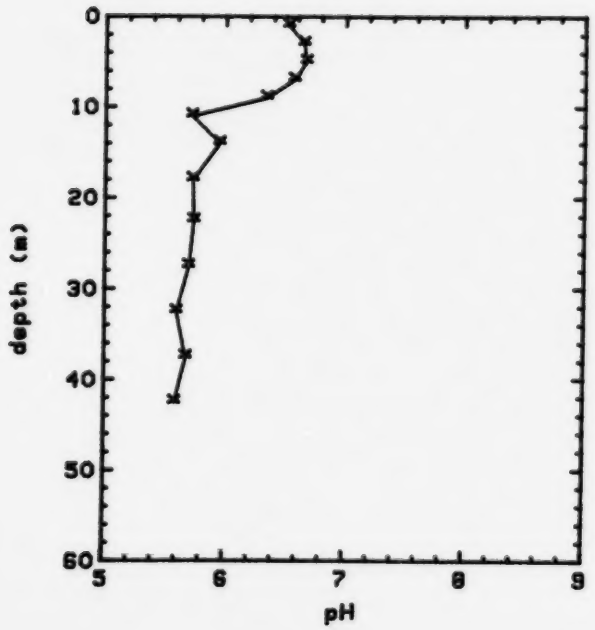



Table 47 con't

# LAKE LOUISA 82.09.08



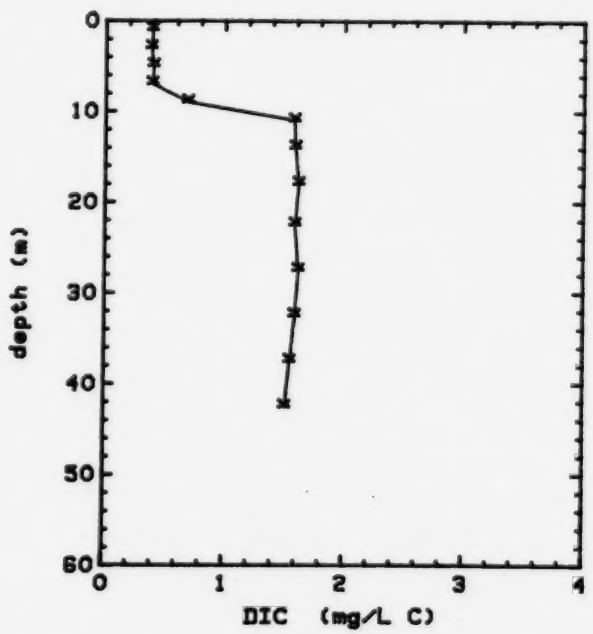
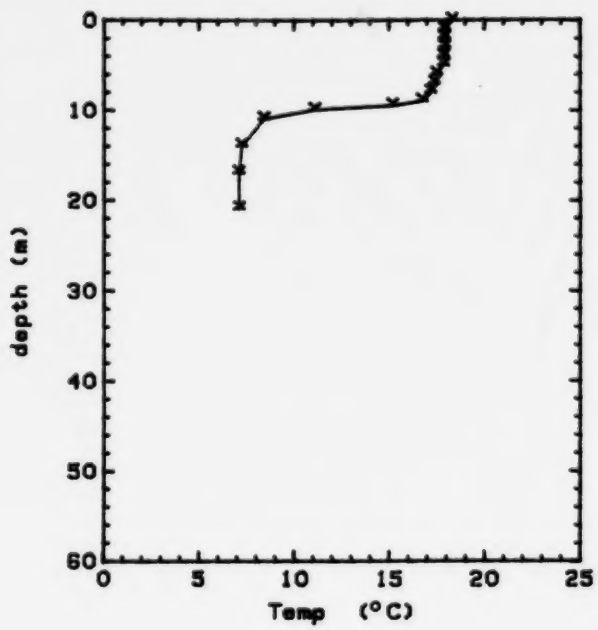
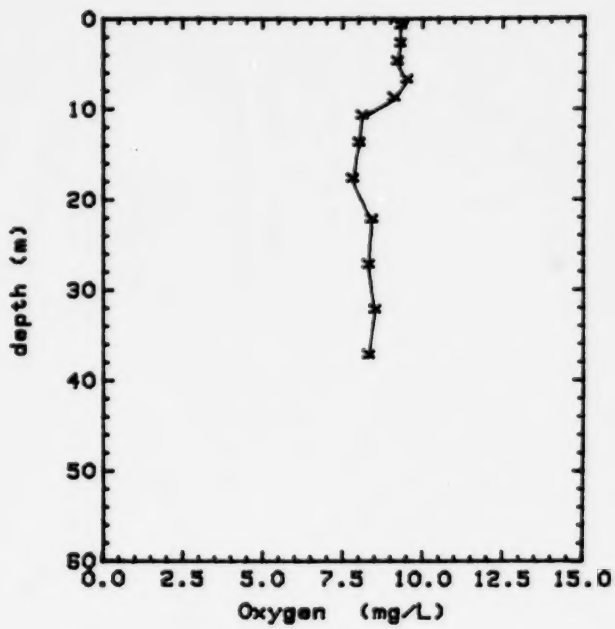
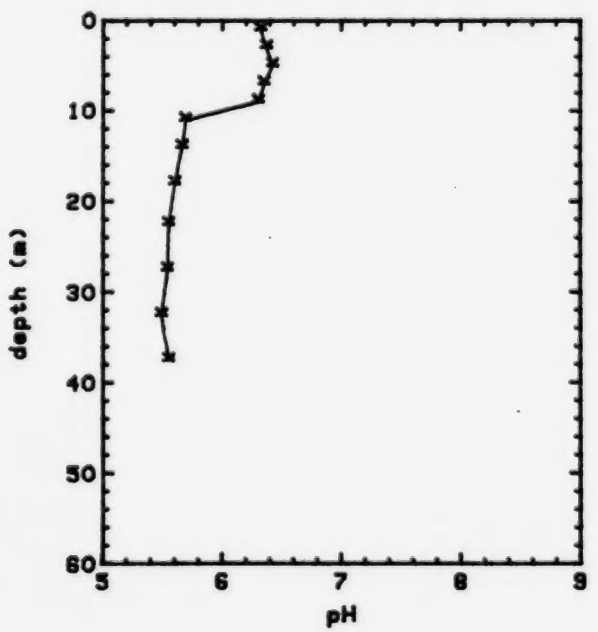



Table 47 con't

# LAKE LOUISA 82.09.30



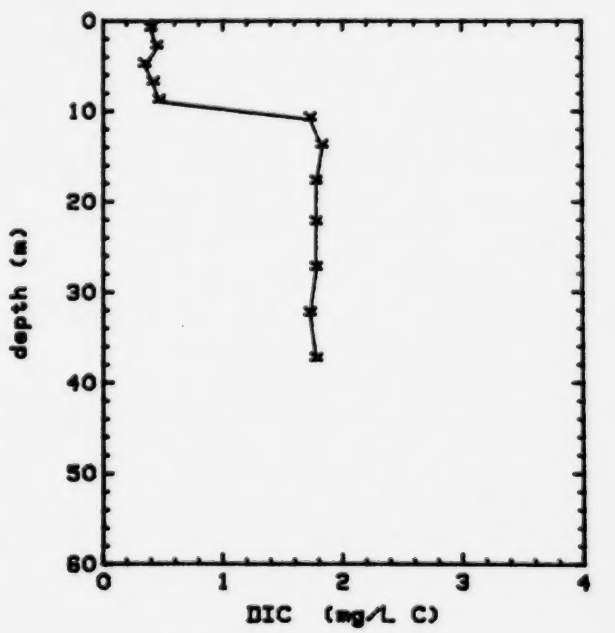
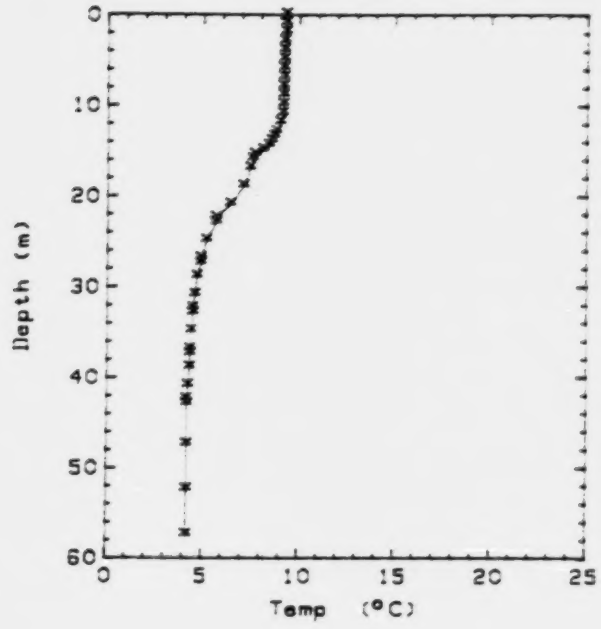
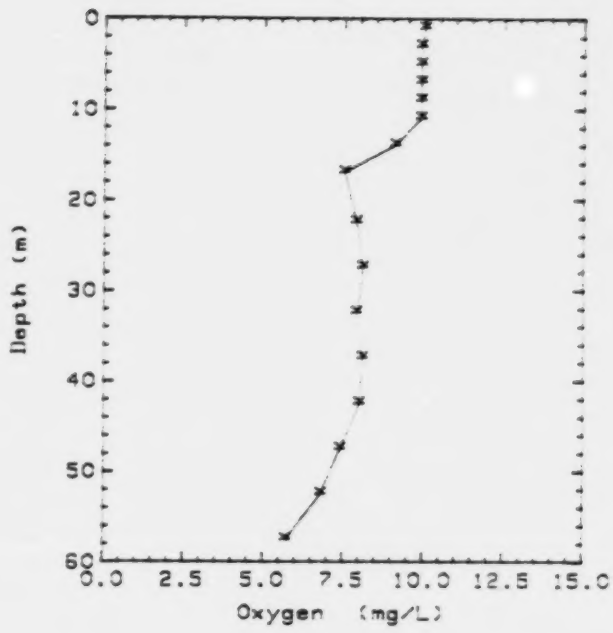
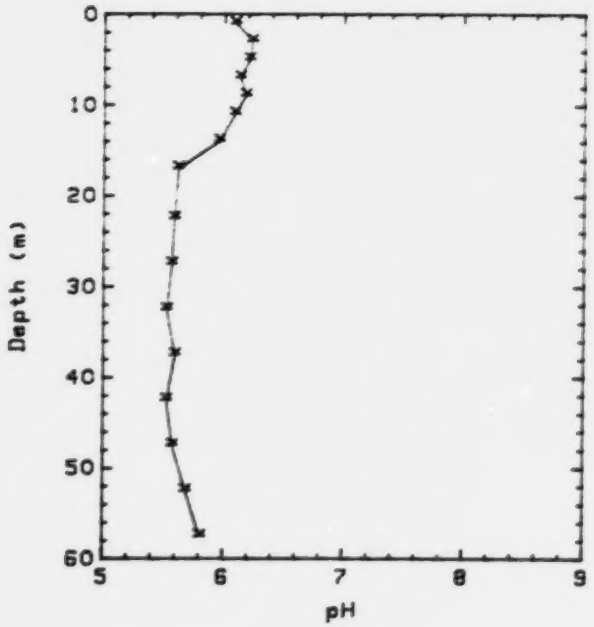



Table 47 con't

LAKE LOUISA 82.11.01



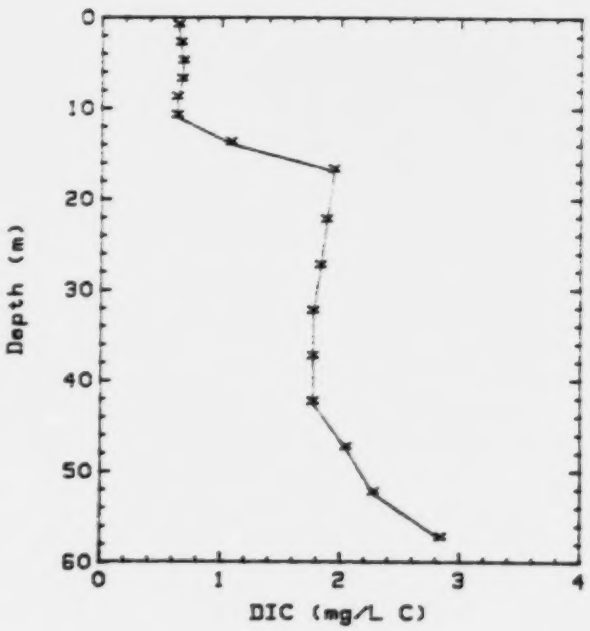
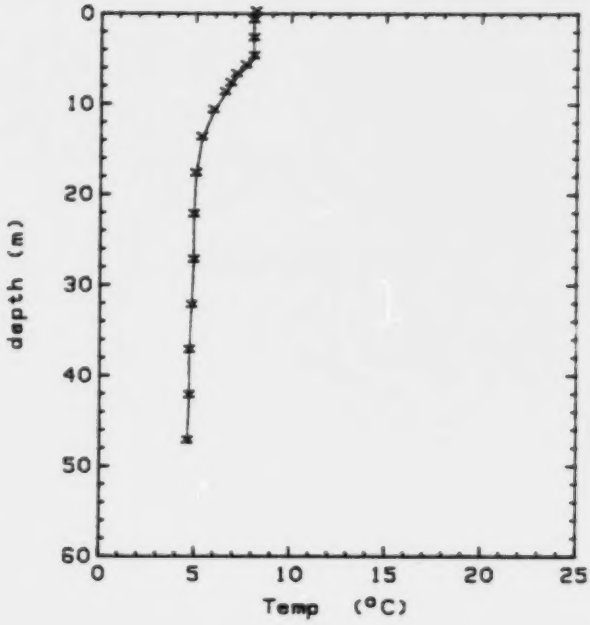
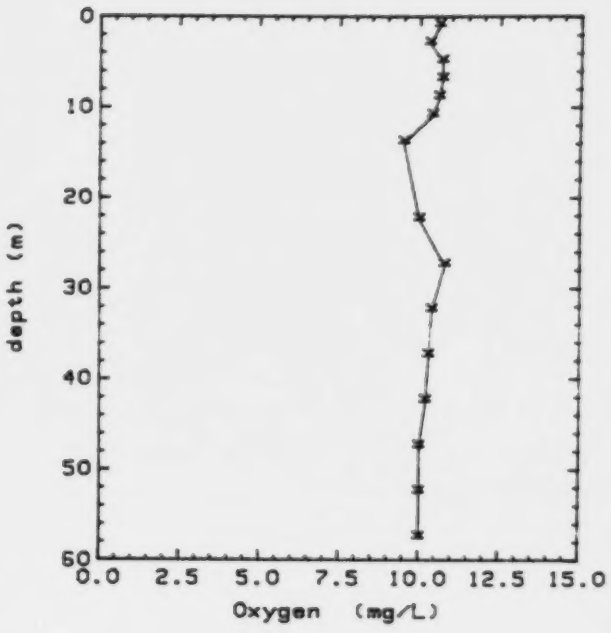
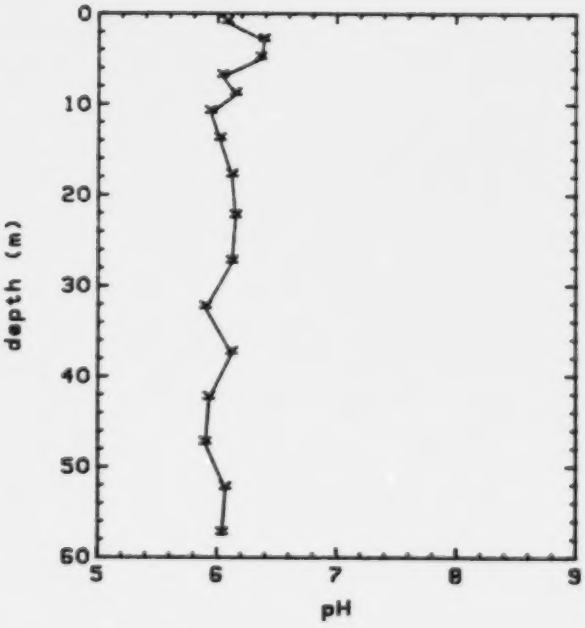



Table 47 con't

# LAKE LOUISA 83.05.16



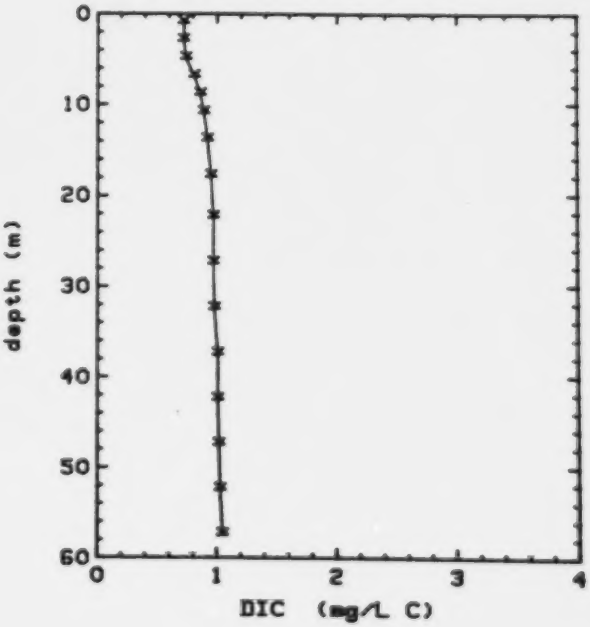
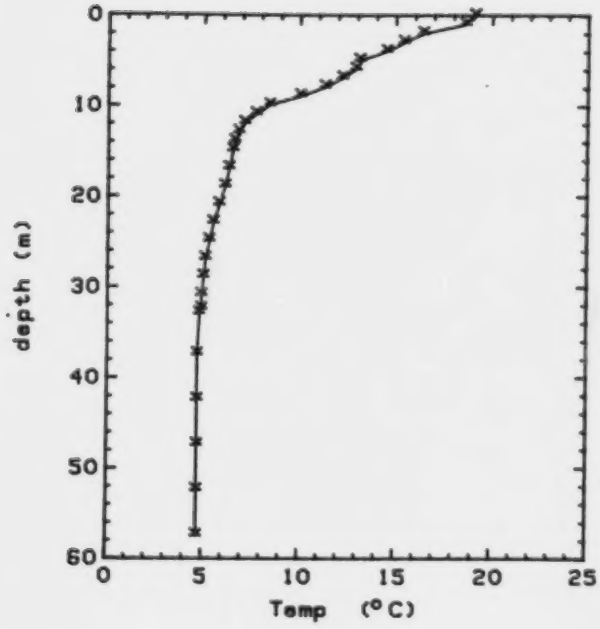
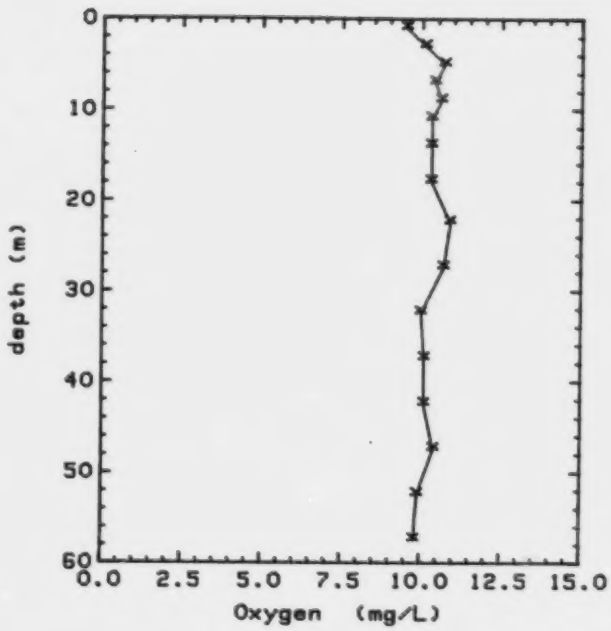
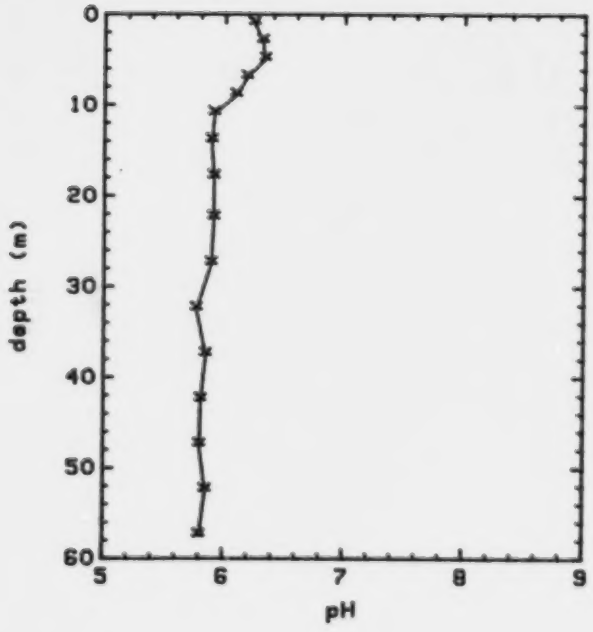



Table 47 con't

# LAKE LOUISA 83.06.15



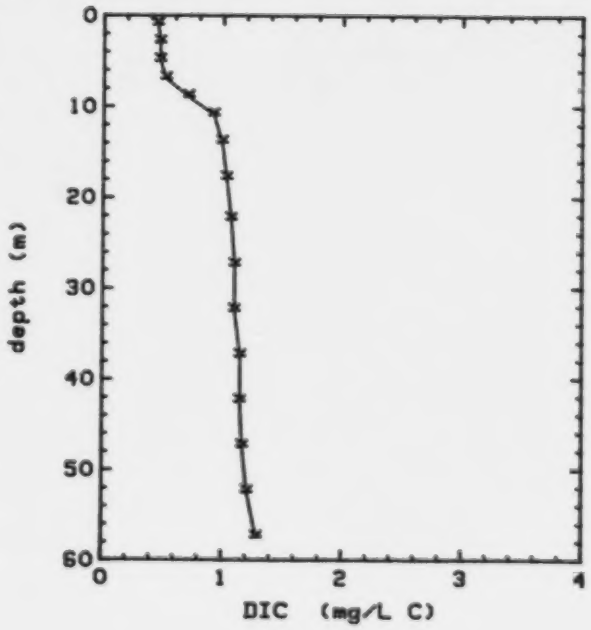
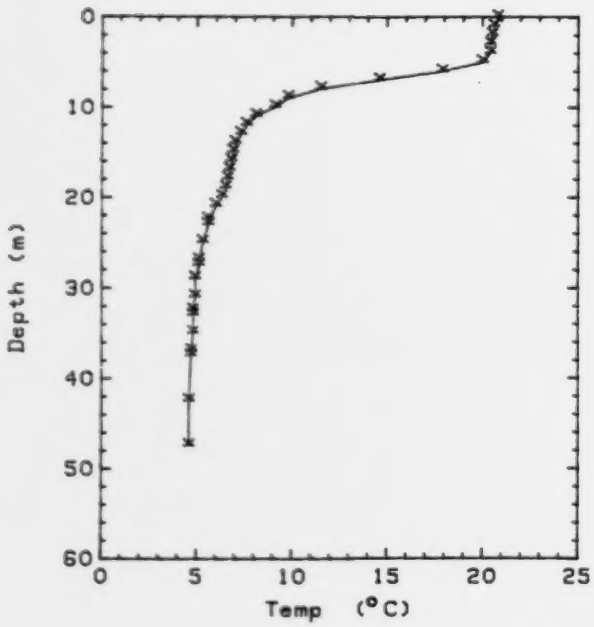
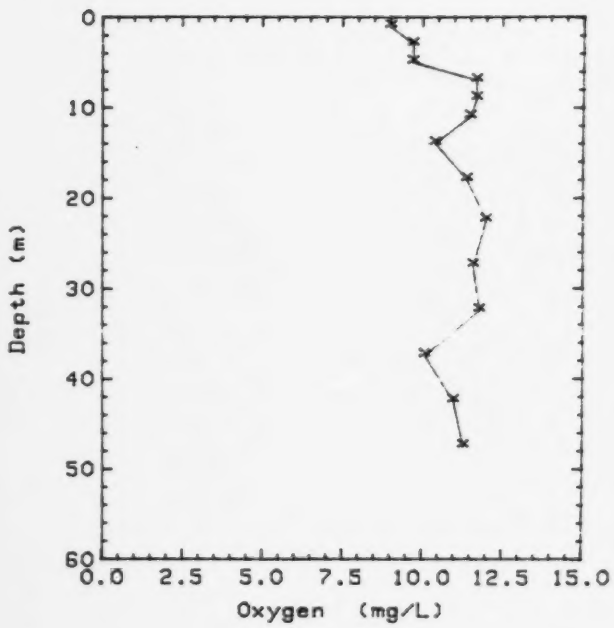
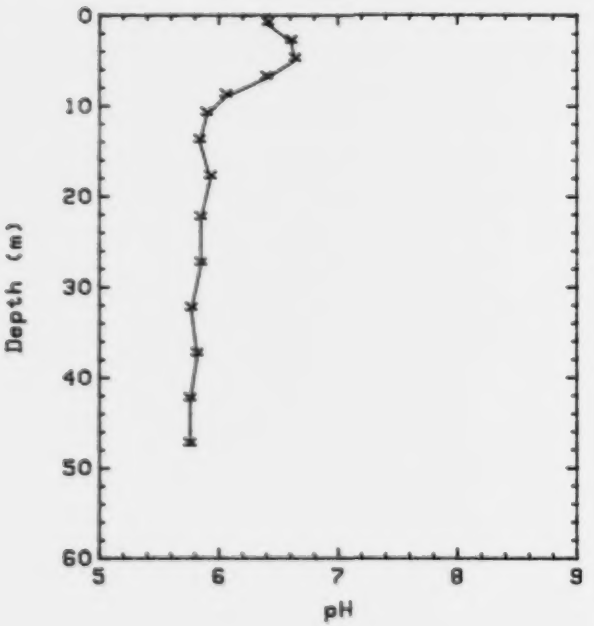



Table 47 con't

LAKE LOUISA 83.07.12



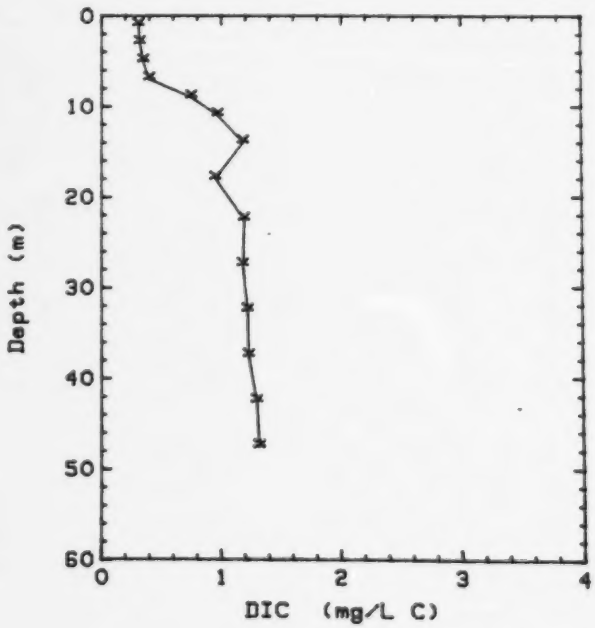
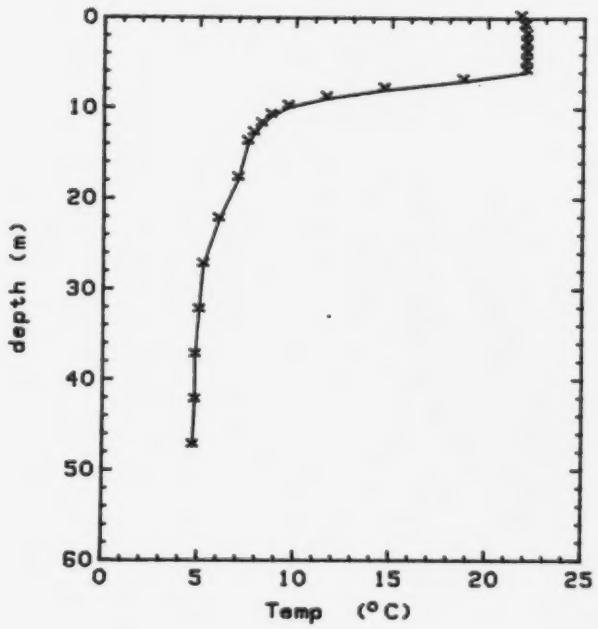
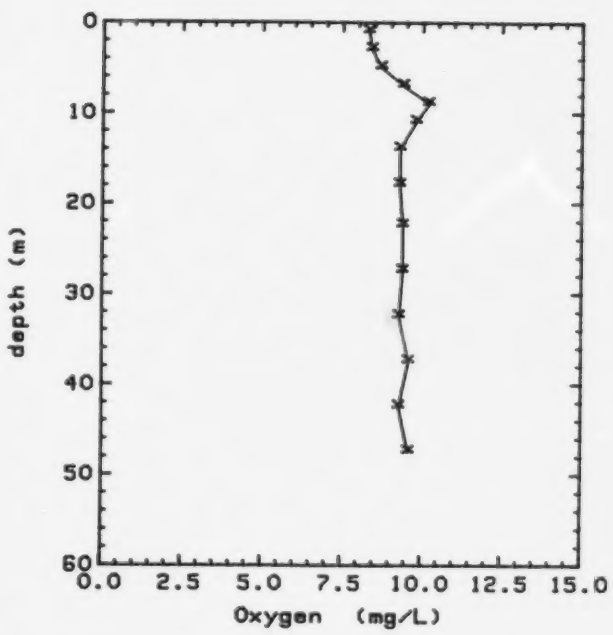
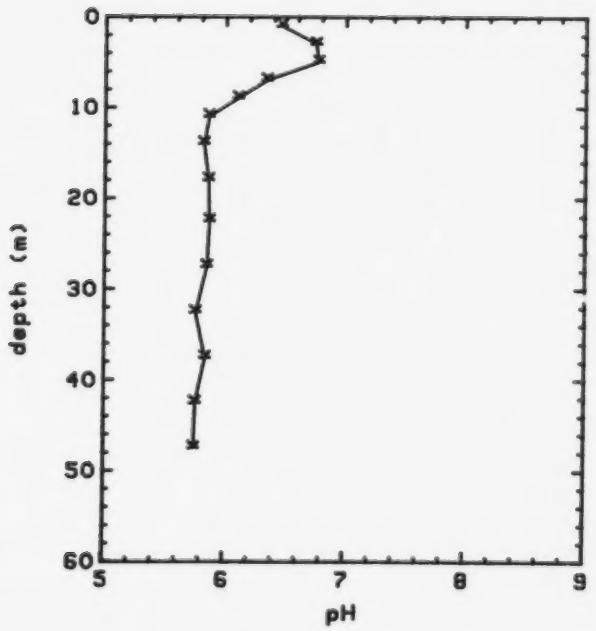



Table 47 con't

# LAKE LOUISA 83.08.10



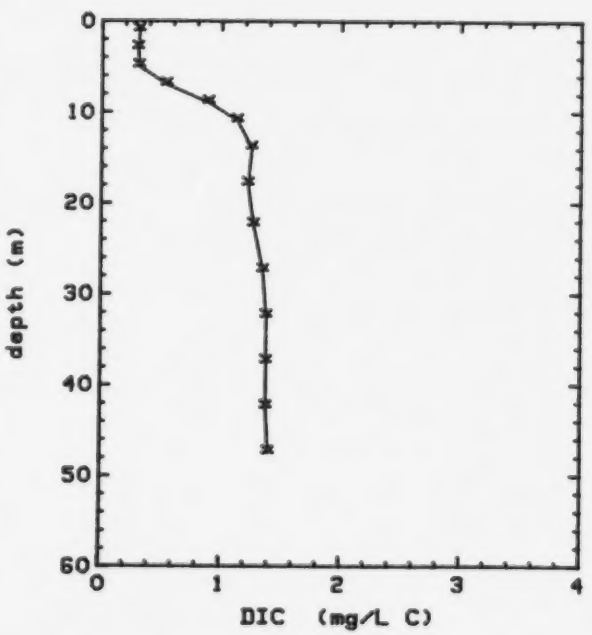
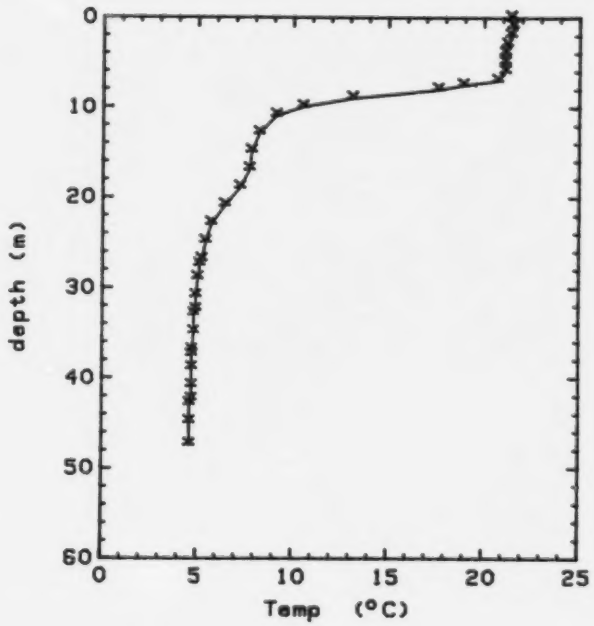
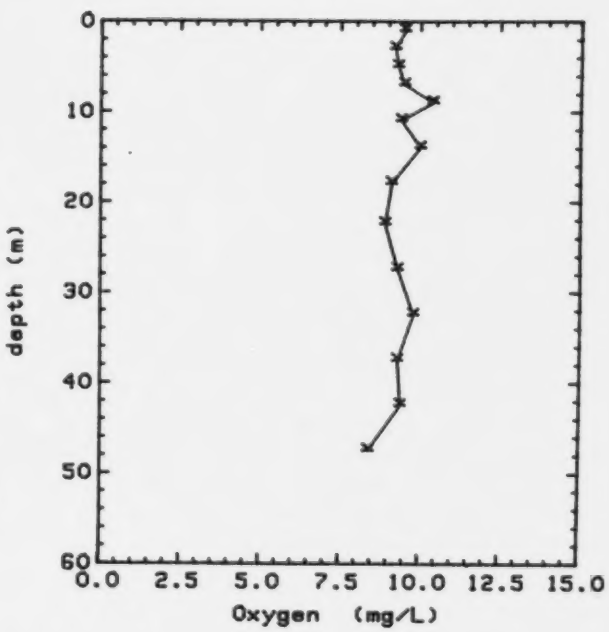
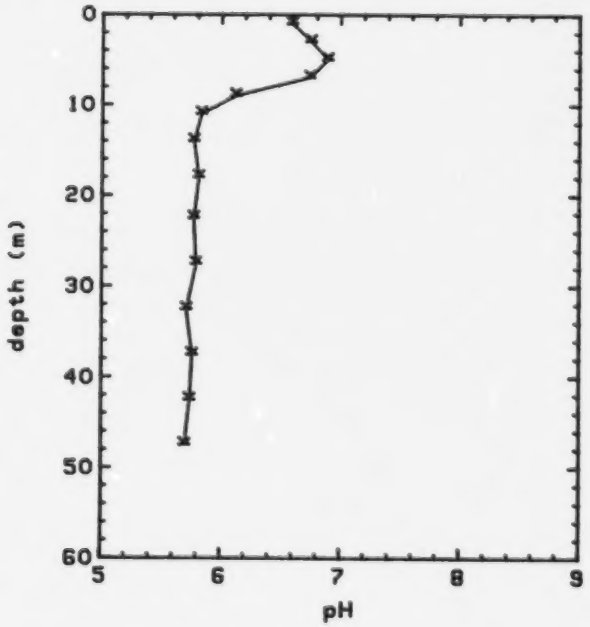



Table 47 con't

# LAKE LOUISA 83.09.08



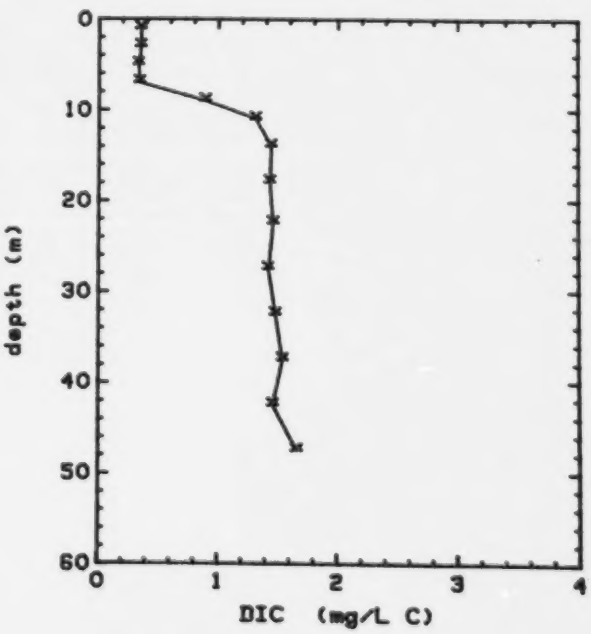
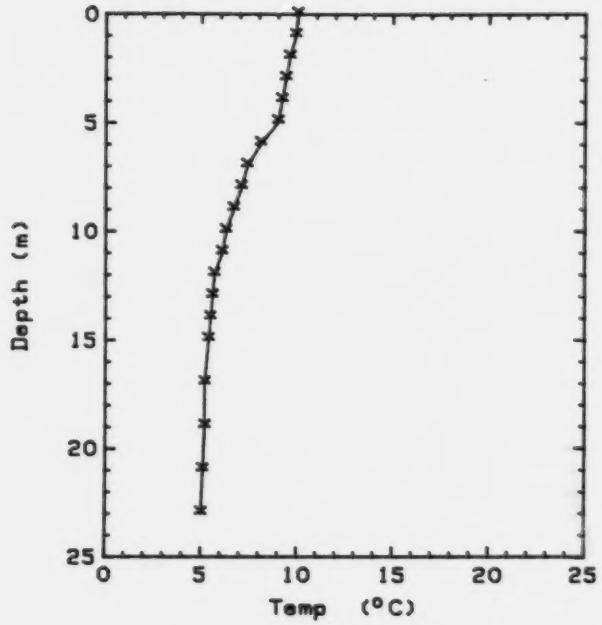
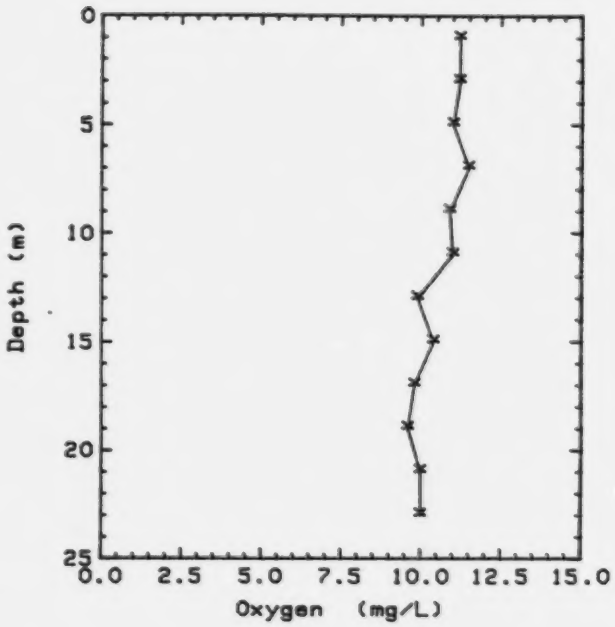



Table 48 Nunikani Lake

# NUNIKANI LAKE 83.05.18



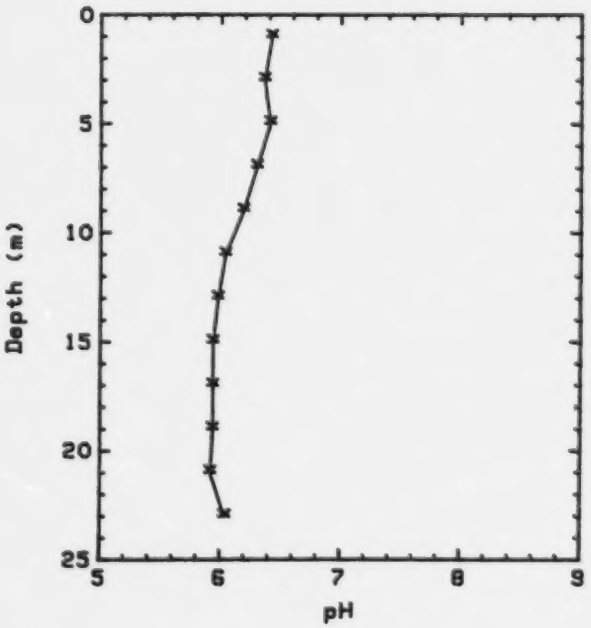
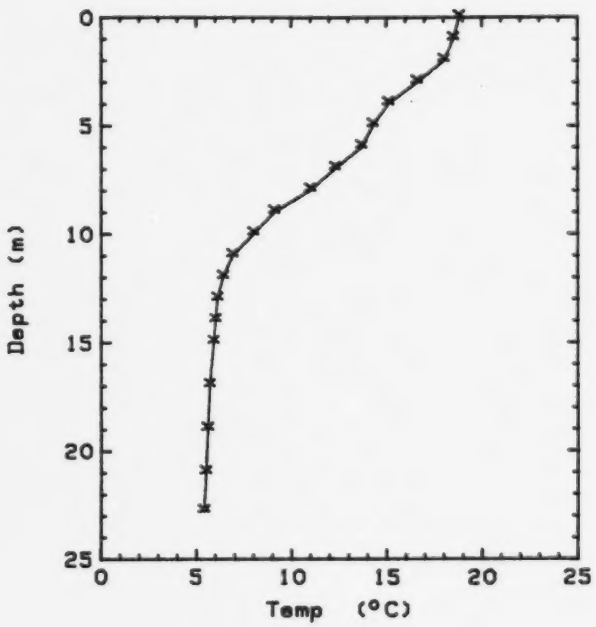
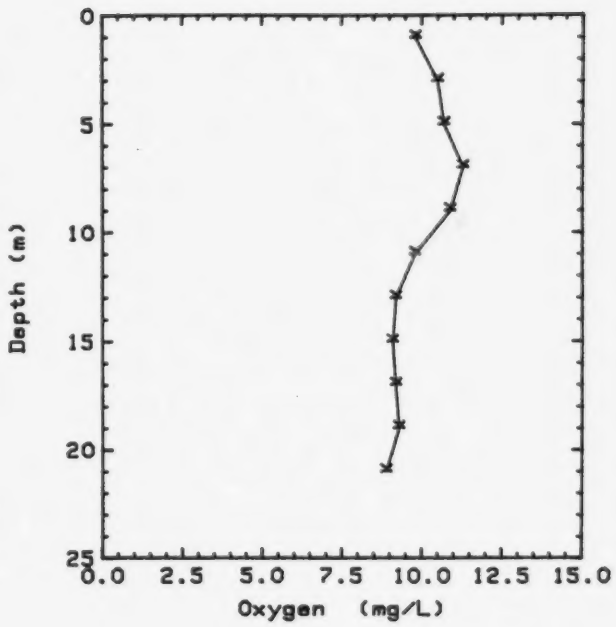



Table 48 con't

# NUNIKANI LAKE 83.06.13



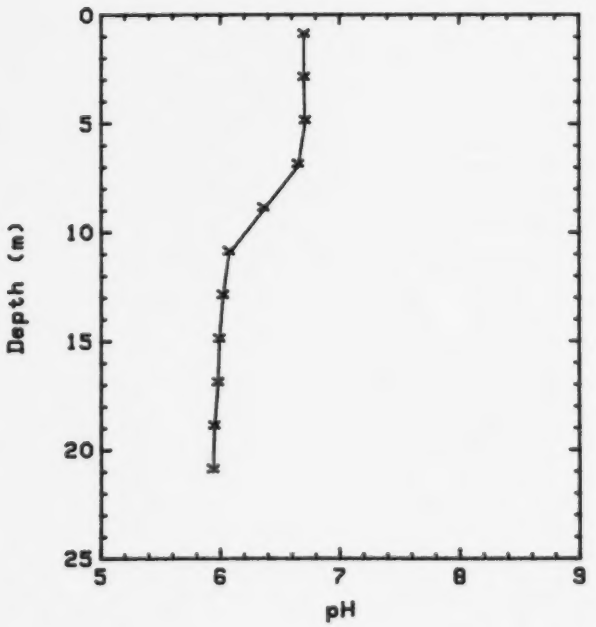
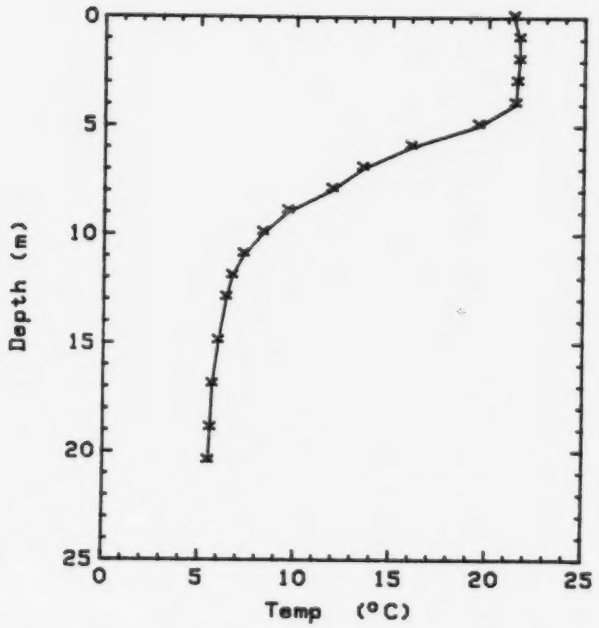
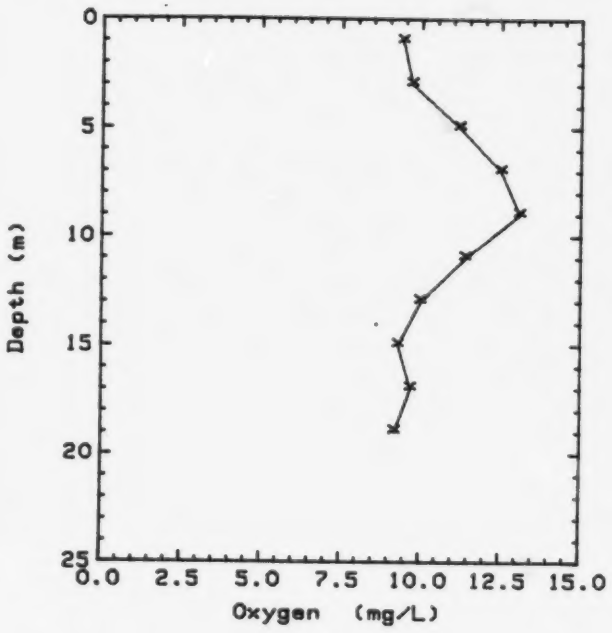



Table 48 con't

# NUNIKANI LAKE 83.07.13



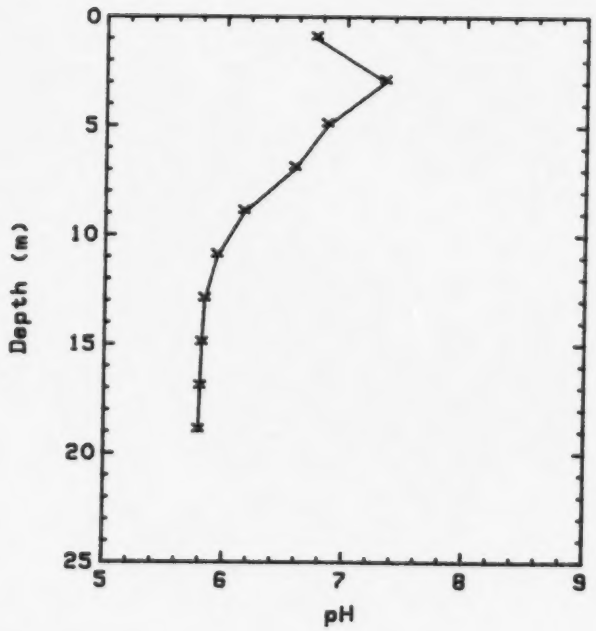
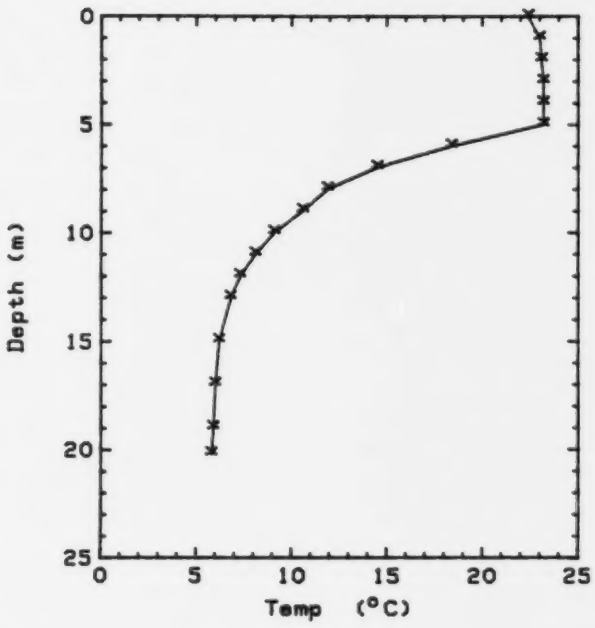
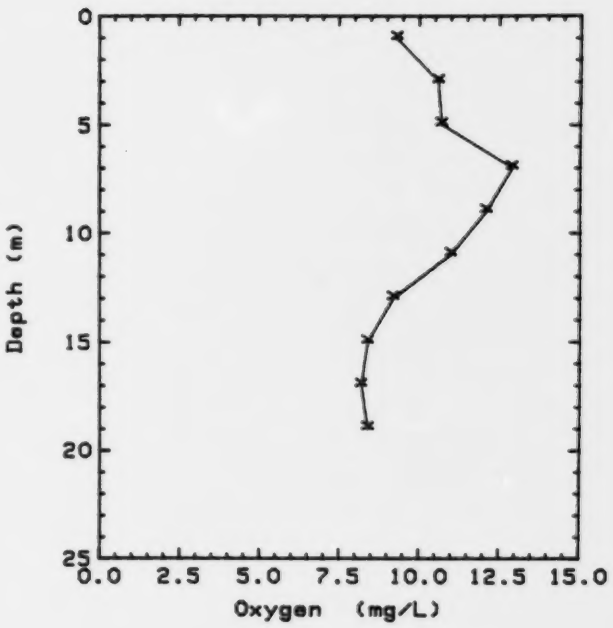



Table 48 con't

# NUNIKANI LAKE 83.08.09



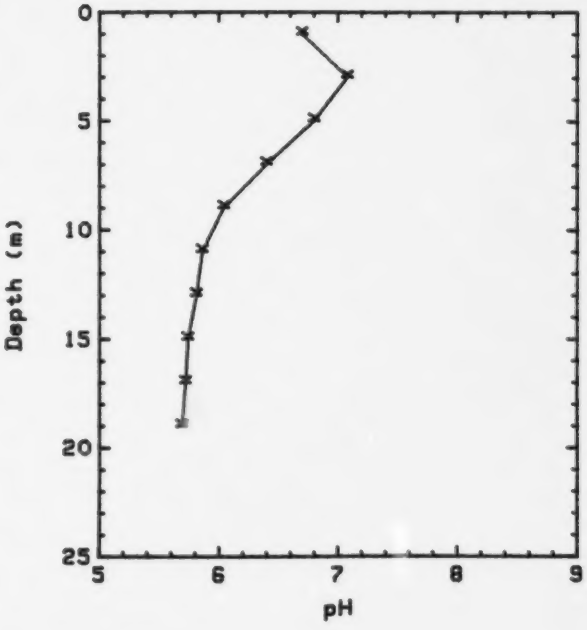
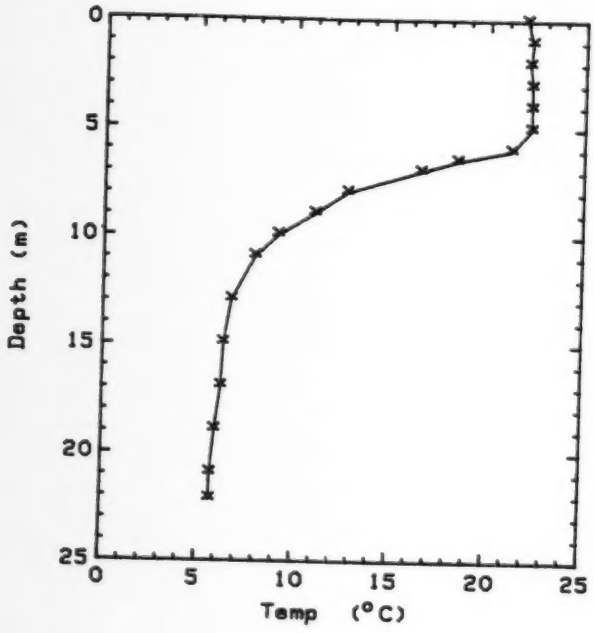
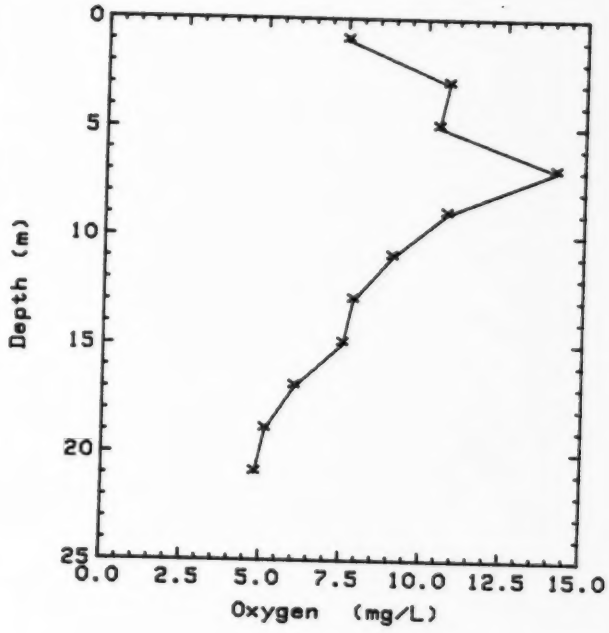



Table 48 con't

# NUNIKANI LAKE 83.08.09



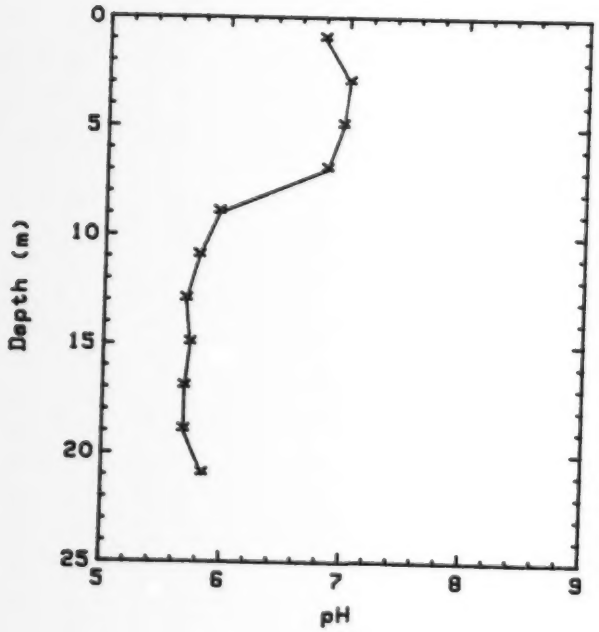
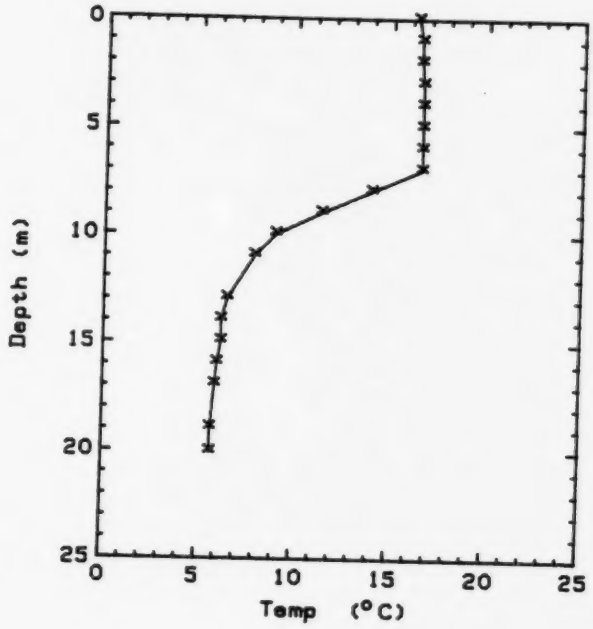
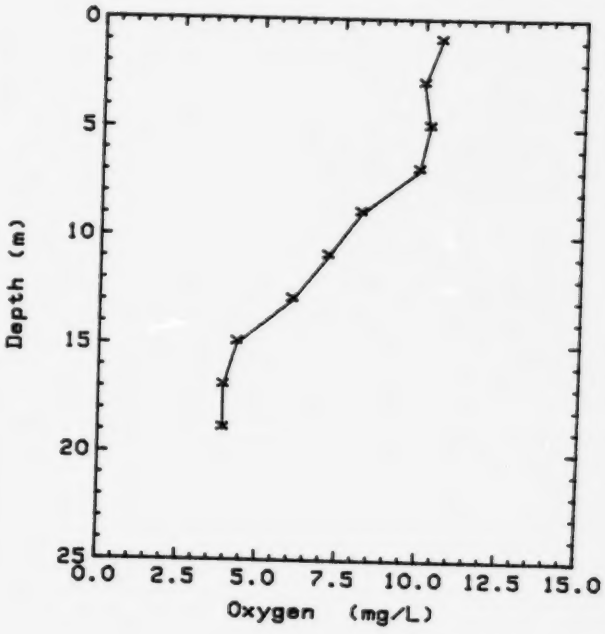



Table 48 con't

# NUNIKANI LAKE 83.10.04



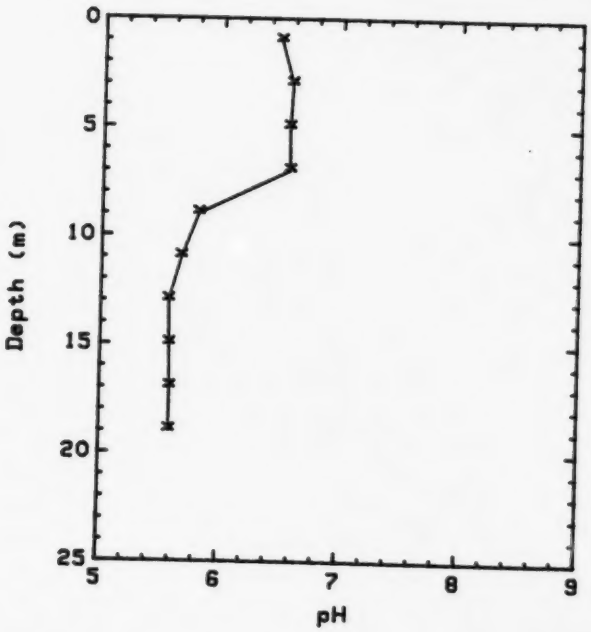
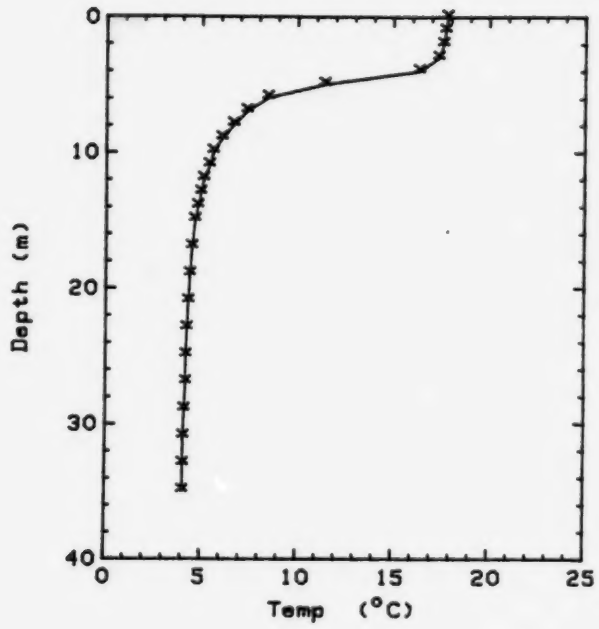
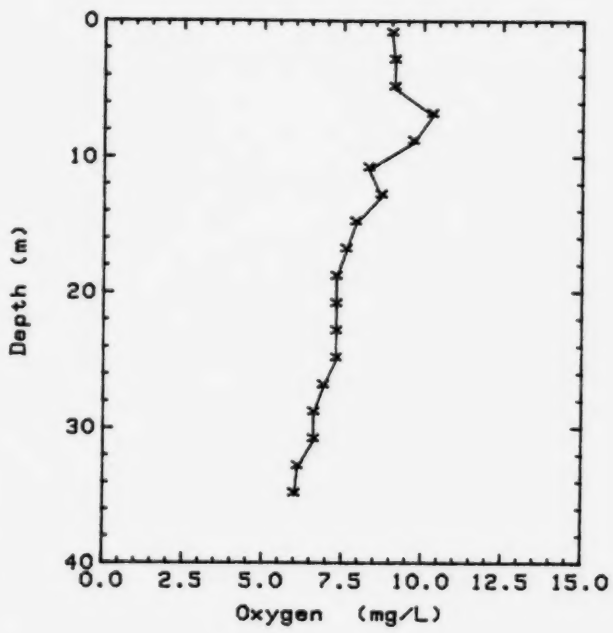



Table 49 Sherborne Lake

SHERBORNE LAKE 82.06.08



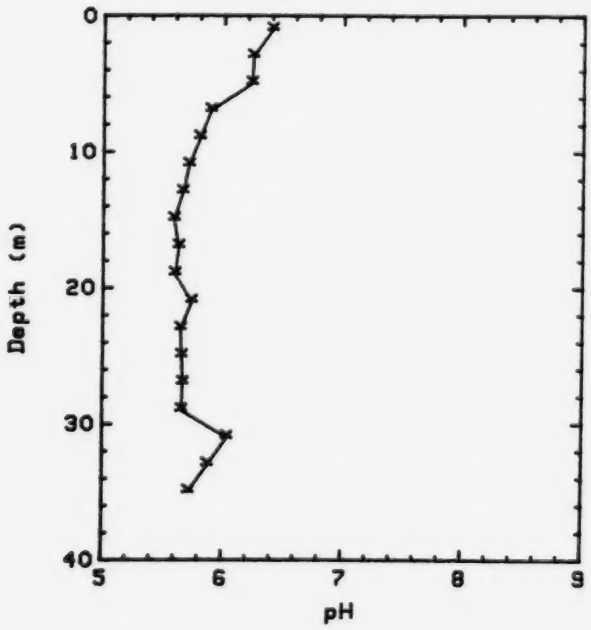
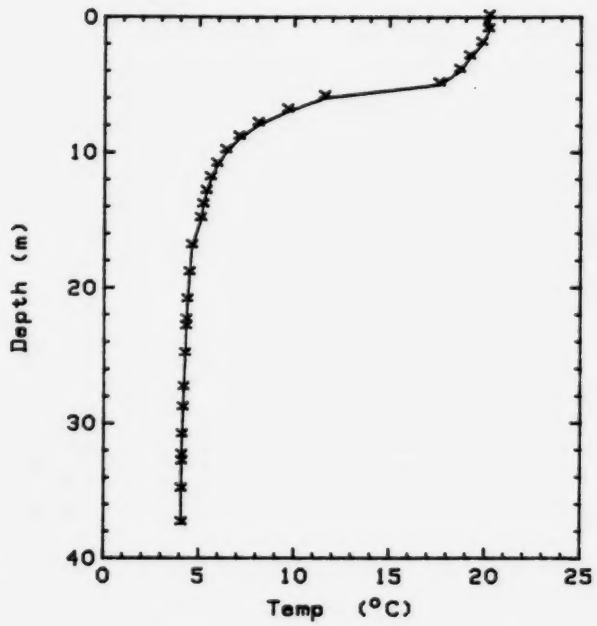
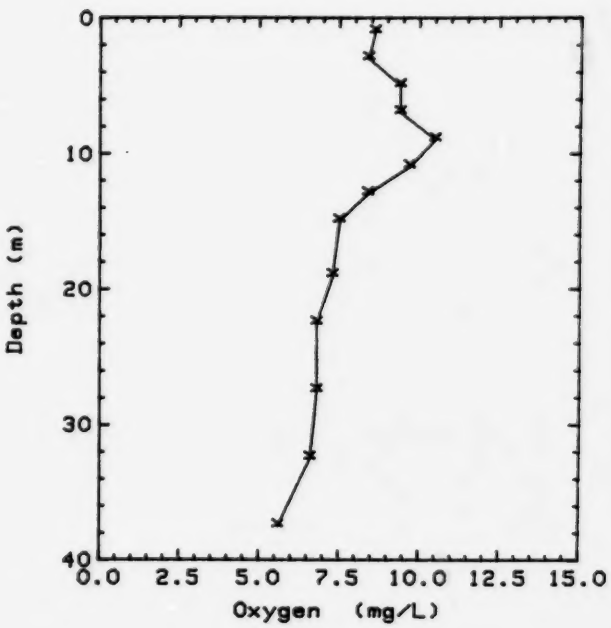



Table 49 con't

# SHERBORNE LAKE 82.06.29



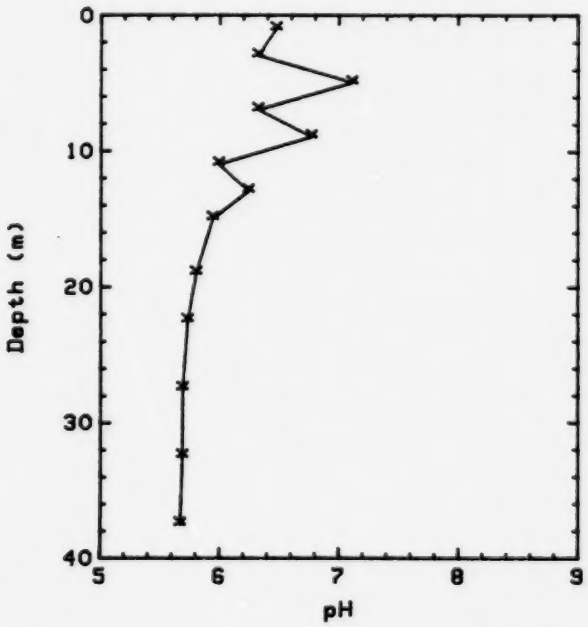
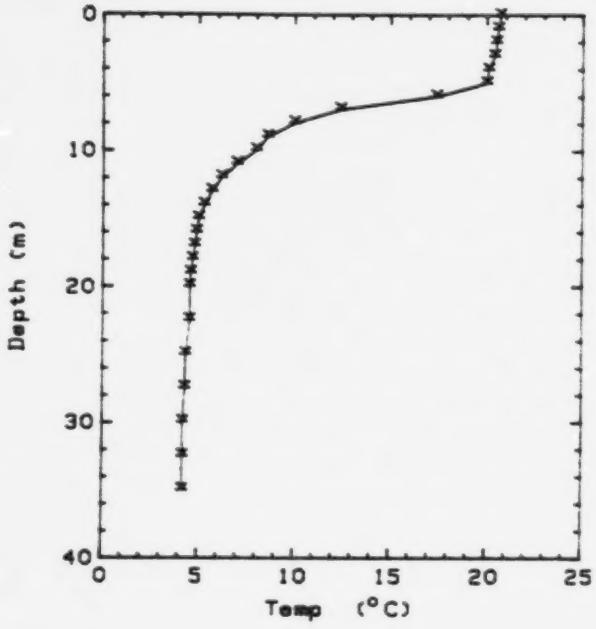
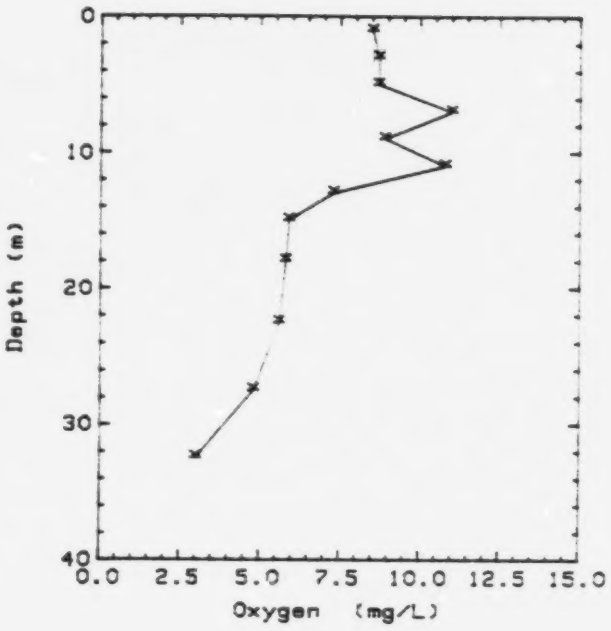



Table 49 con't

# SHERBORNE LAKE 82.08.16



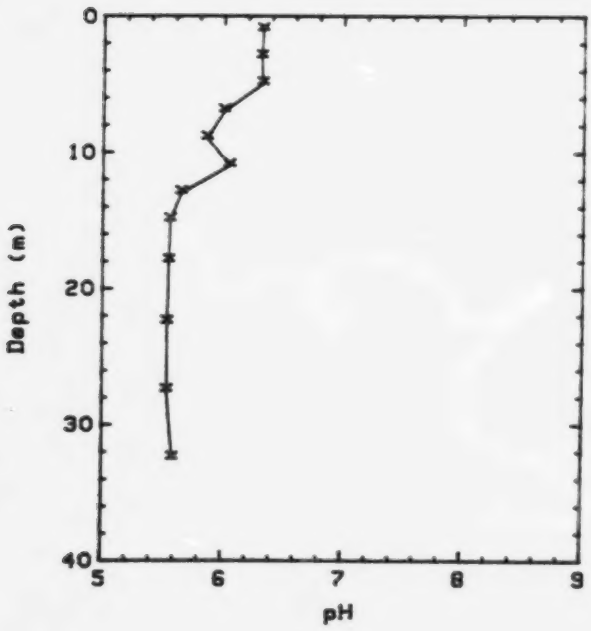
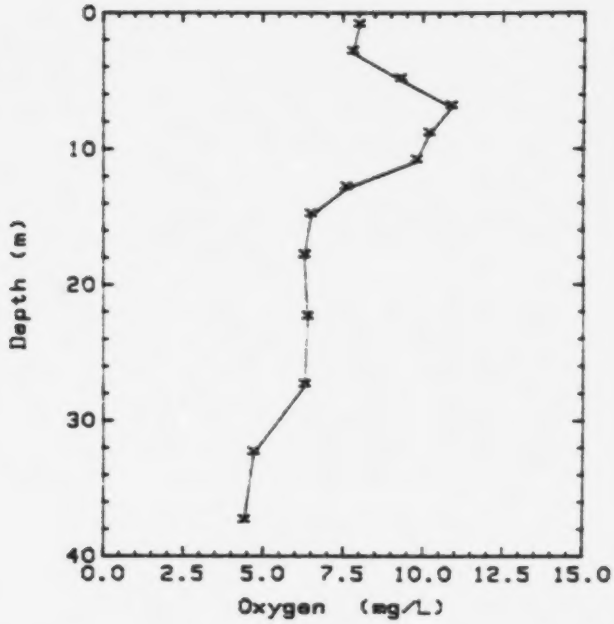



Table 49 con't

# SHERBORNE LAKE 82.07.22



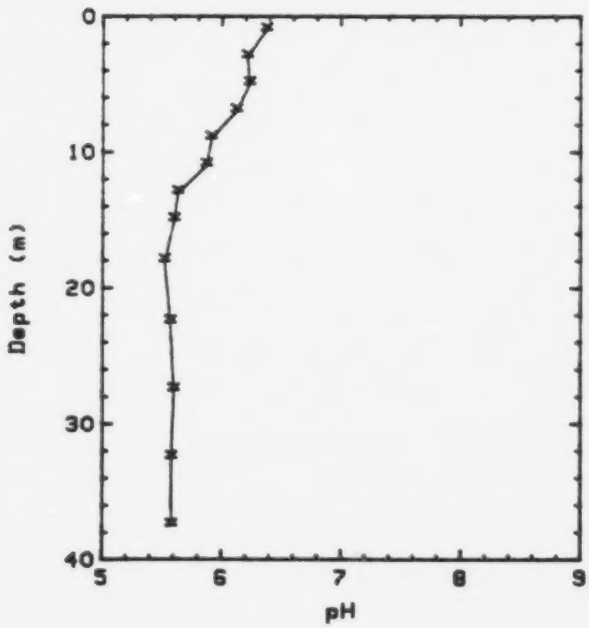
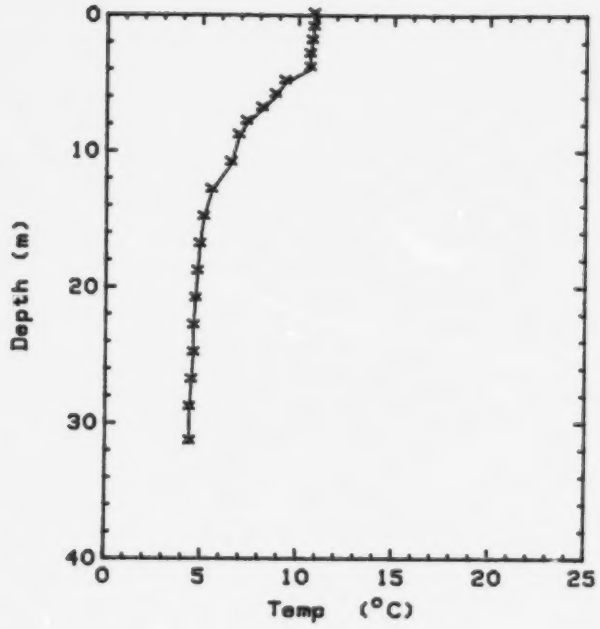
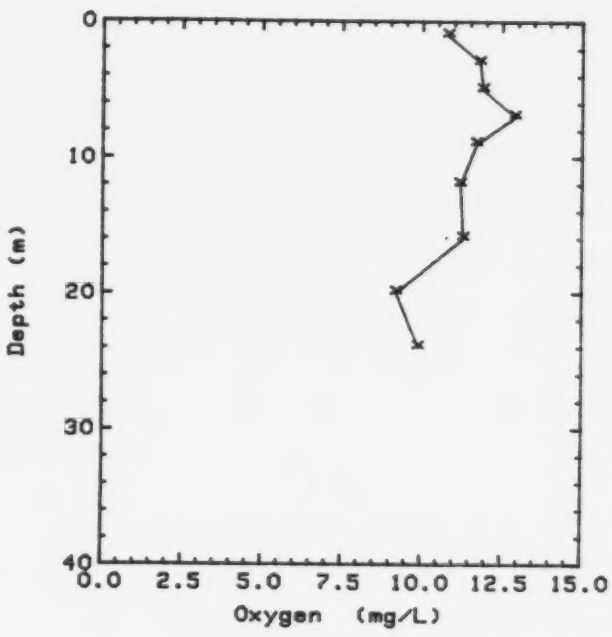



Table 49 con't

# SHERBORNE LAKE 83.05.18



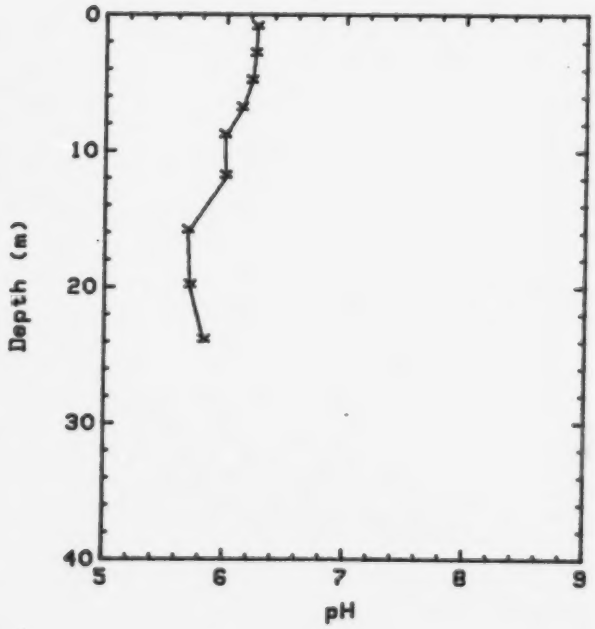
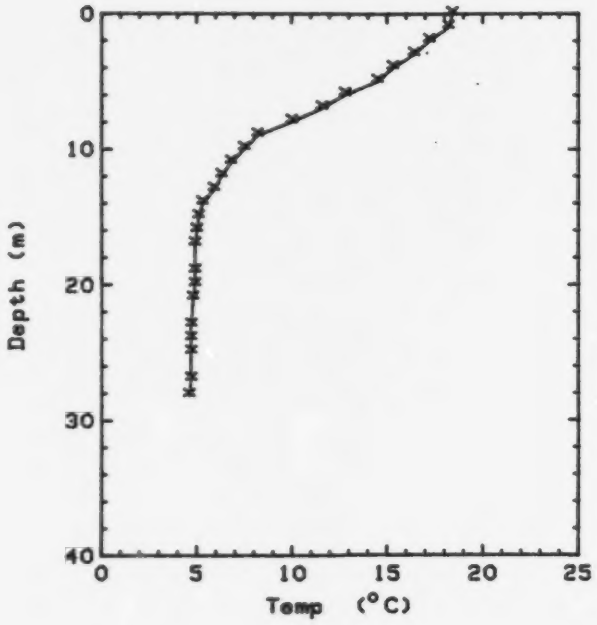
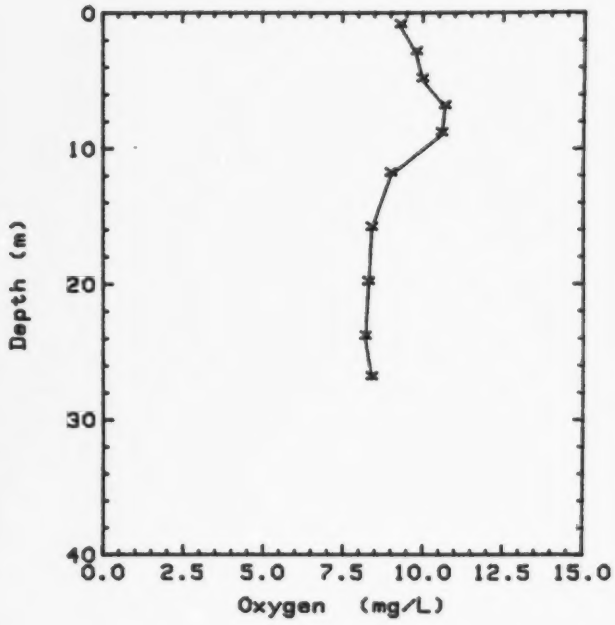



Table 49 con't

# SHERBORNE LAKE 83.06.13



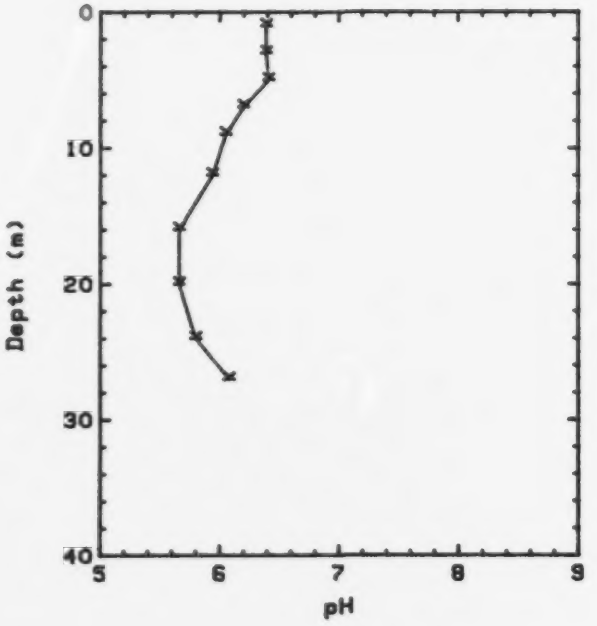
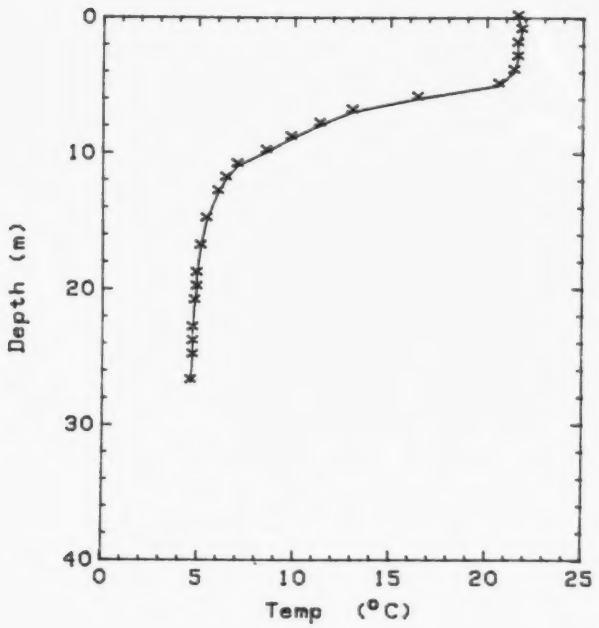
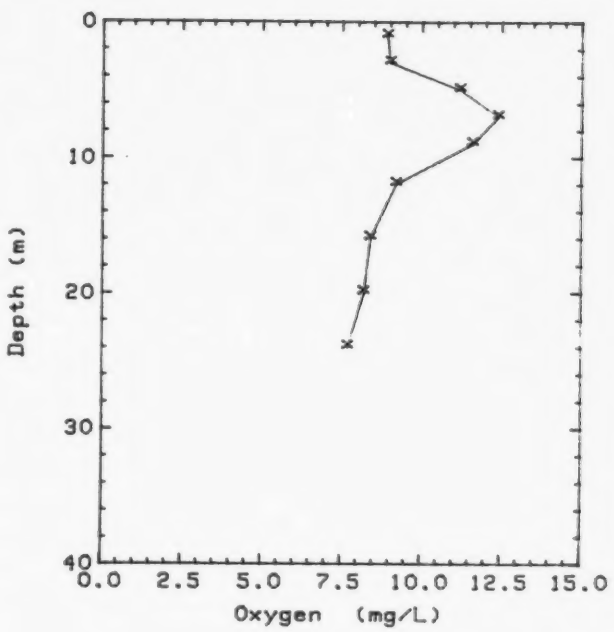



Table 49 con't

SHERBORNE LAKE 83.07.13



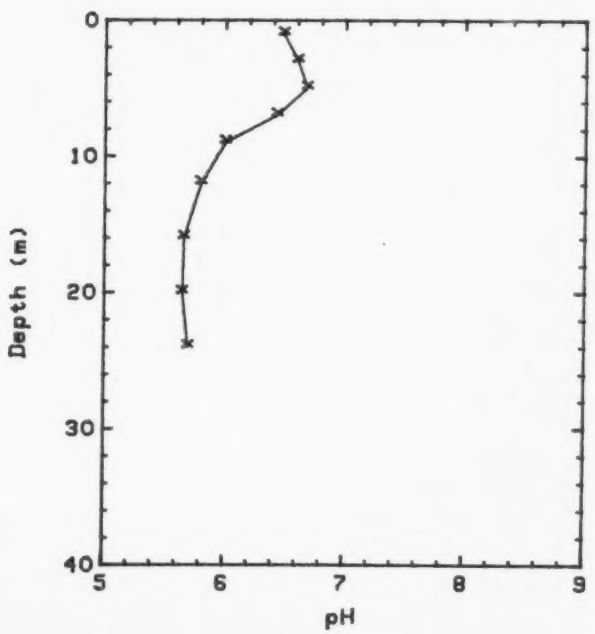
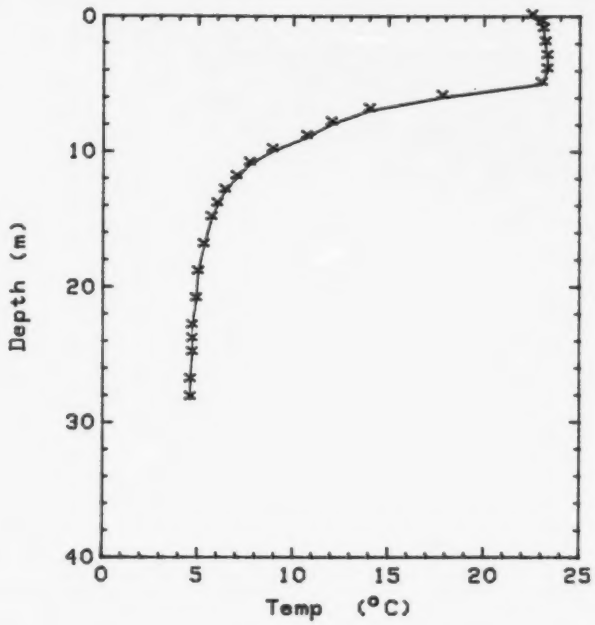
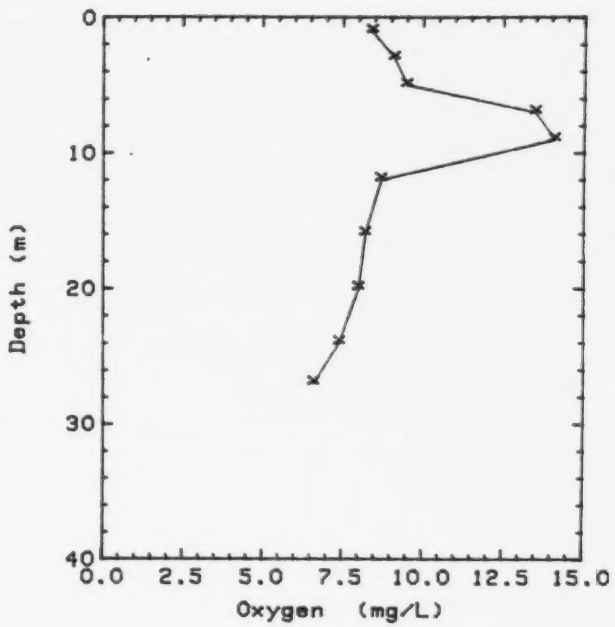



Table 49 con't

SHERBORNE LAKE 83.08.09



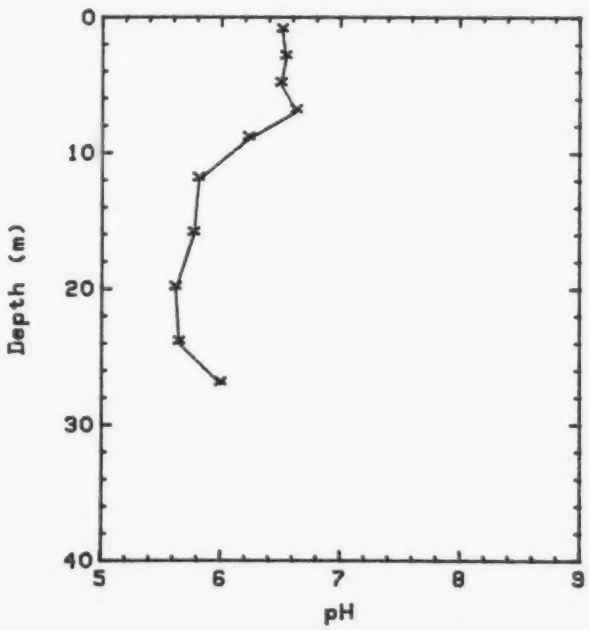
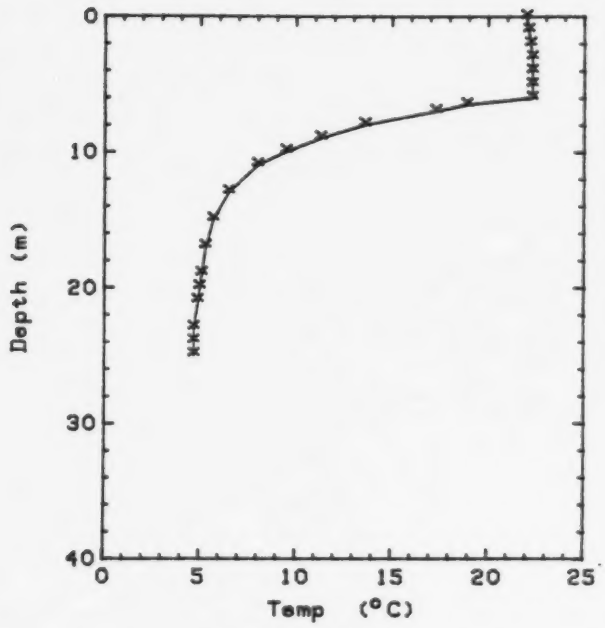
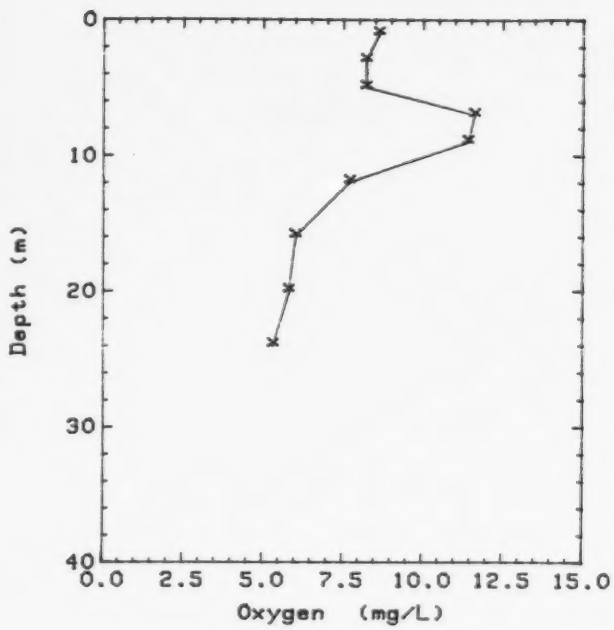



Table 49 con't

# SHERBORNE LAKE 83.09.07



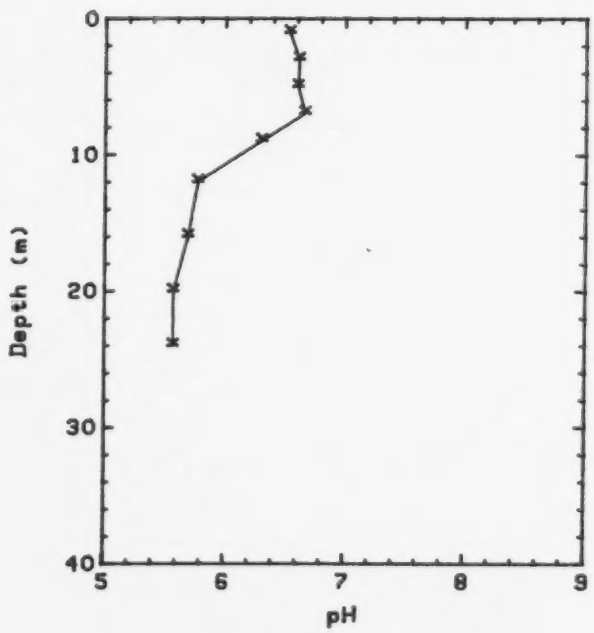
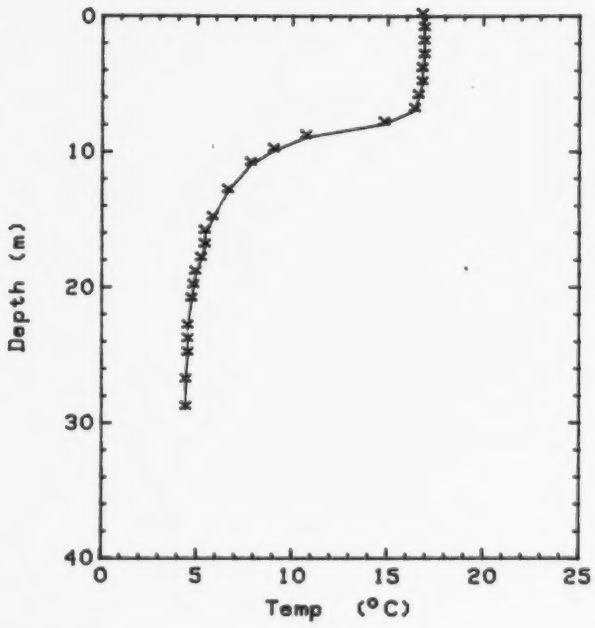
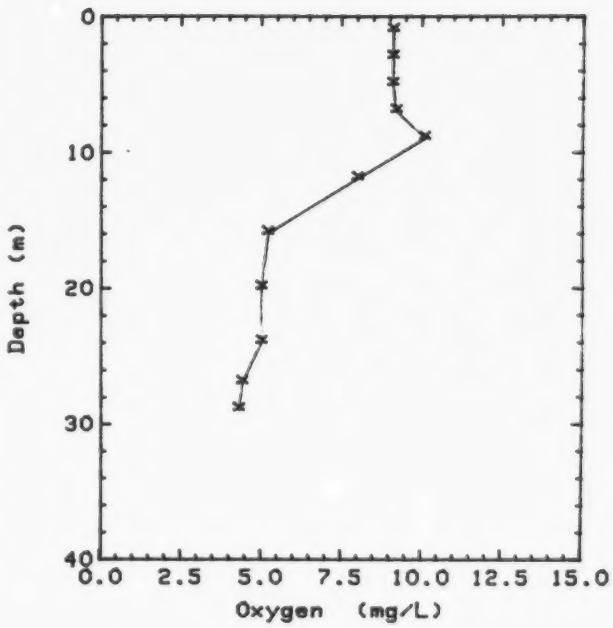



Table 49 con't

# SHERBORNE LAKE 83.10.04



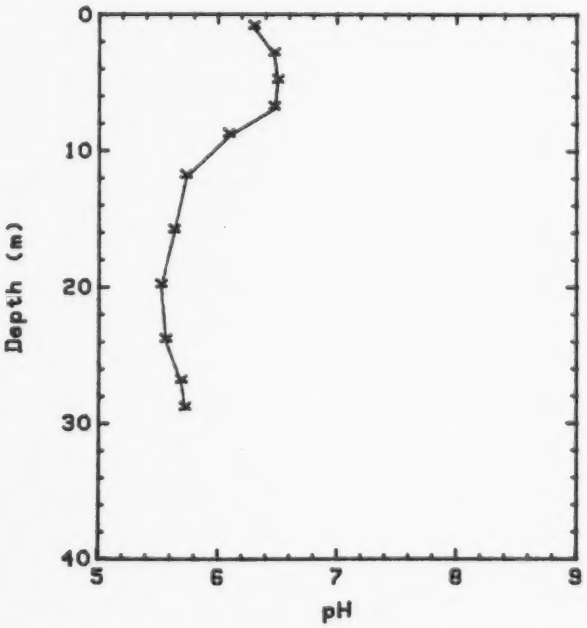
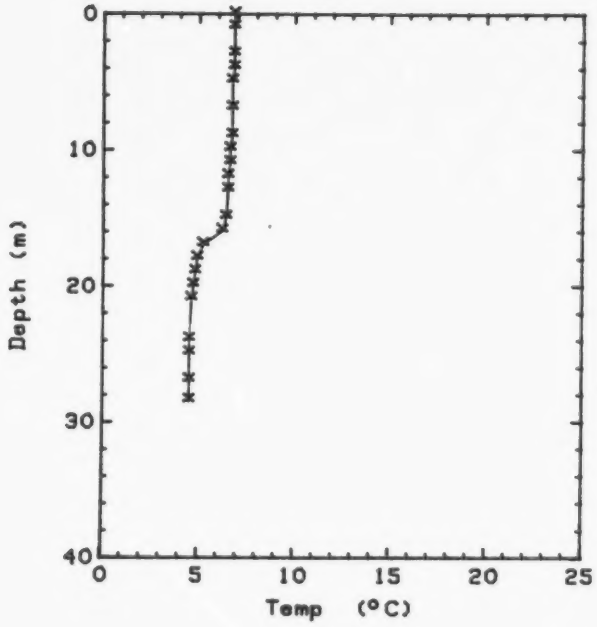
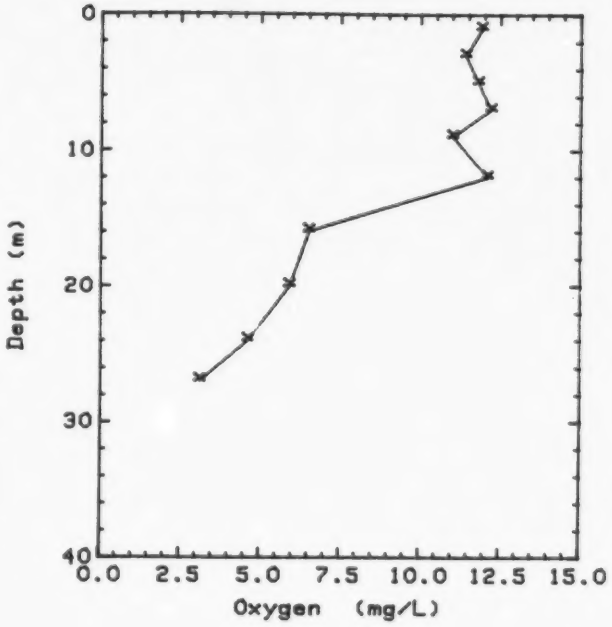



Table 49 con't

# SHERBORNE LAKE 83.11.09



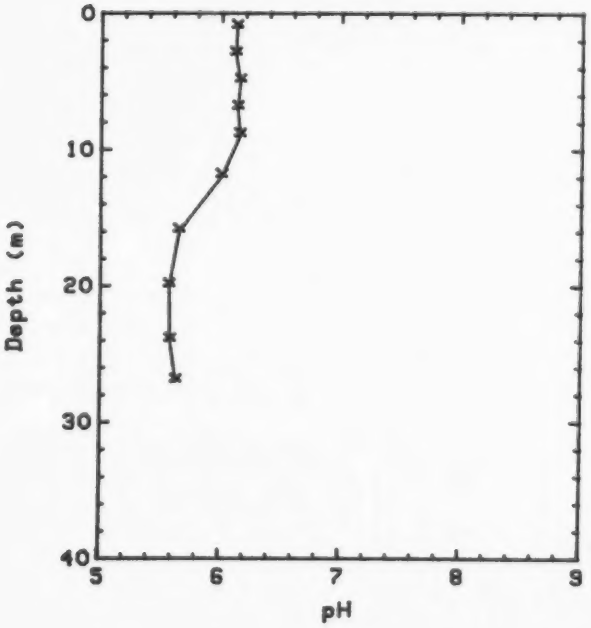
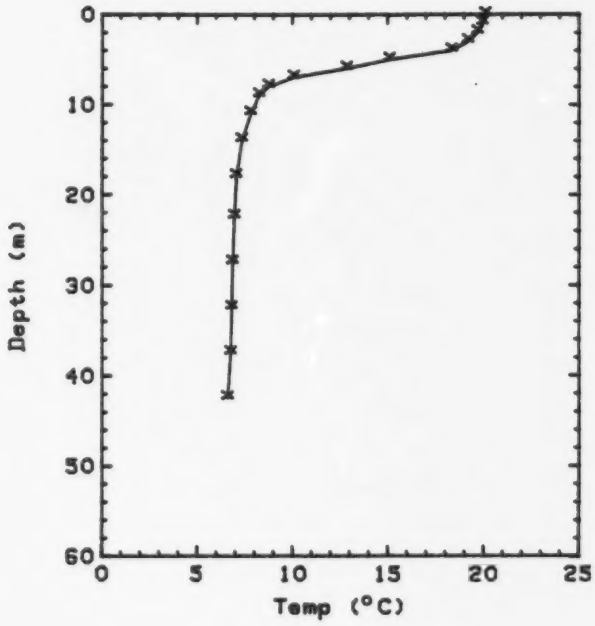
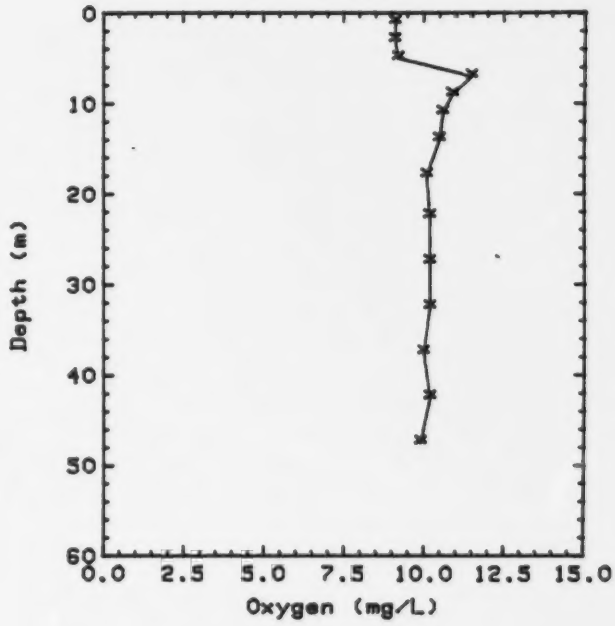
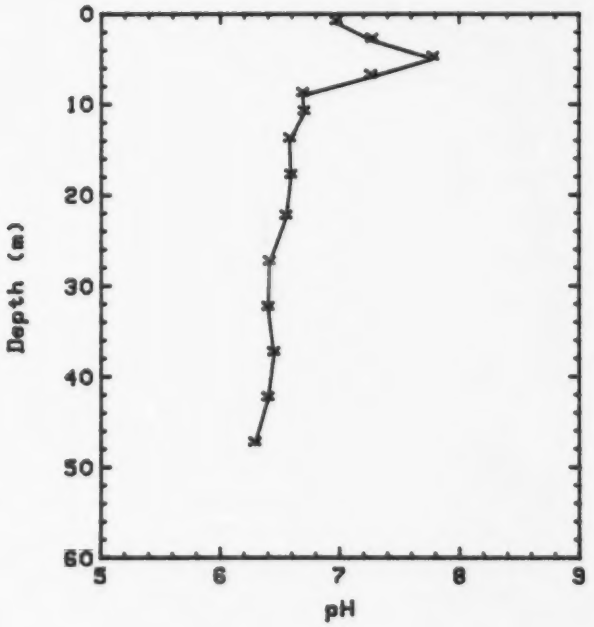



Table 50 Smoke Lake

SMOKE LAKE 81.06.16



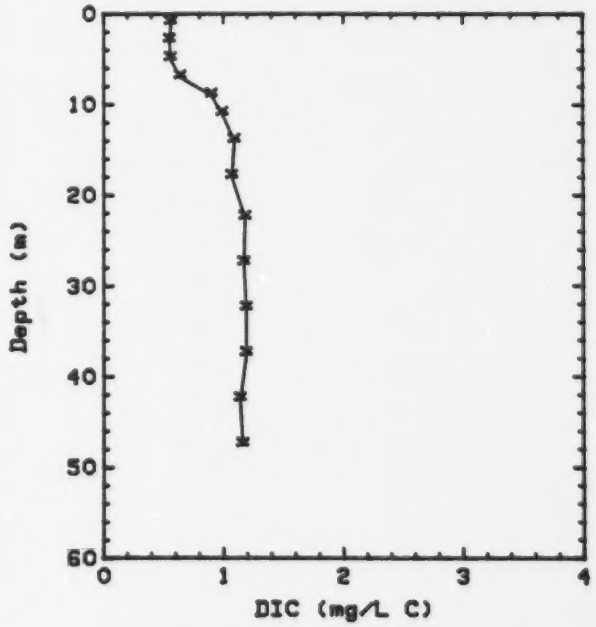
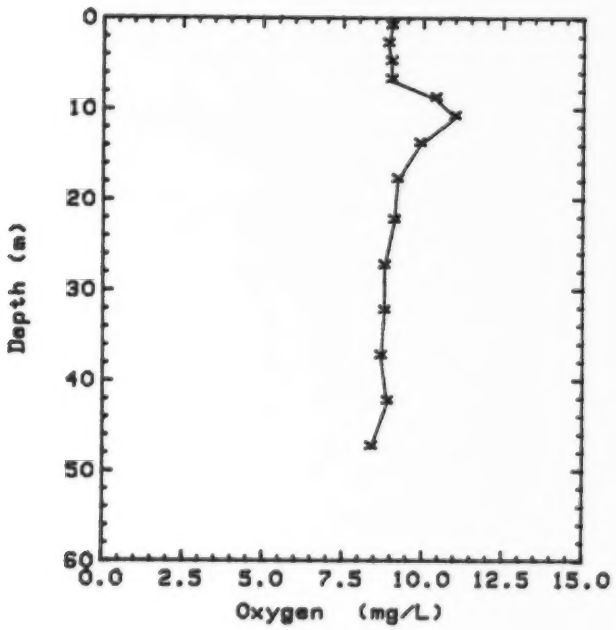



Table 50 con't

# SMOKE LAKE 81.08.04



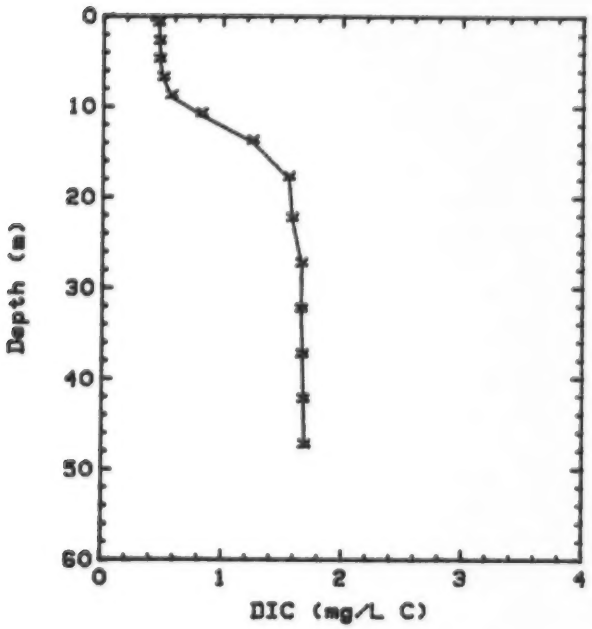
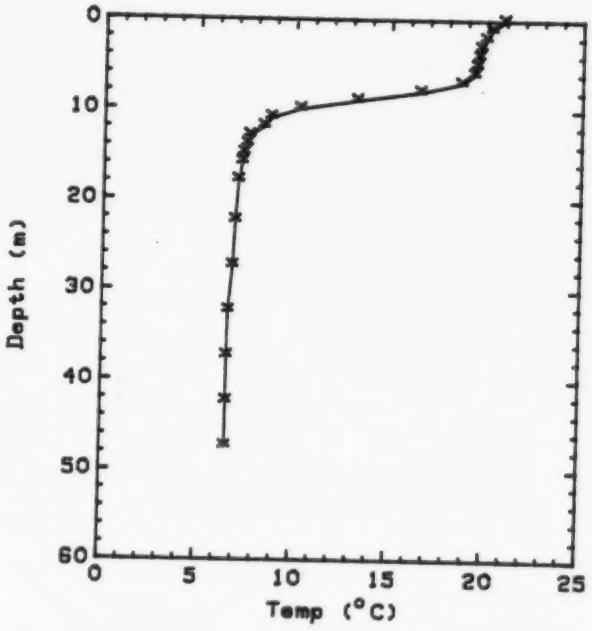
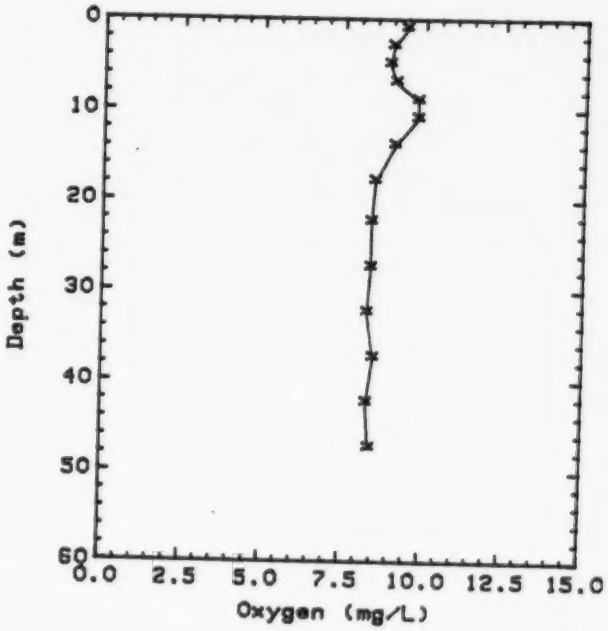



Table 50 con't

# SMOKE LAKE 81.08.18



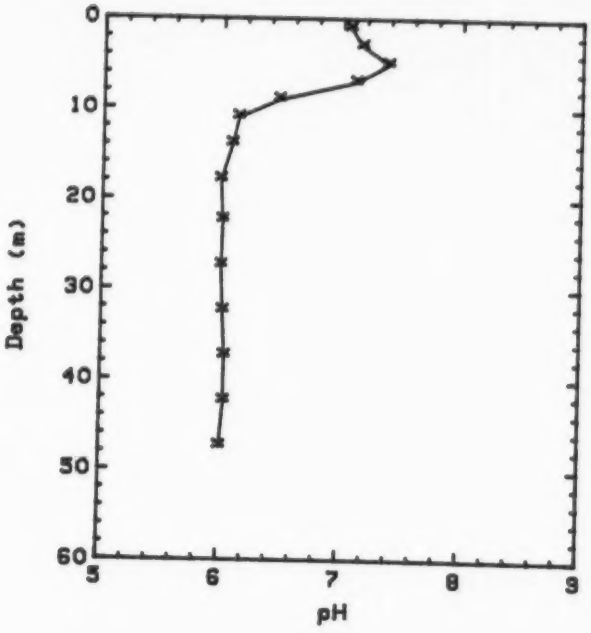
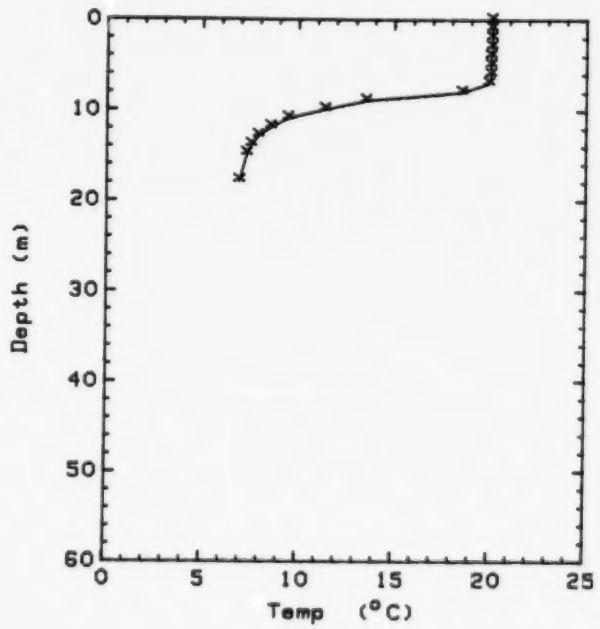
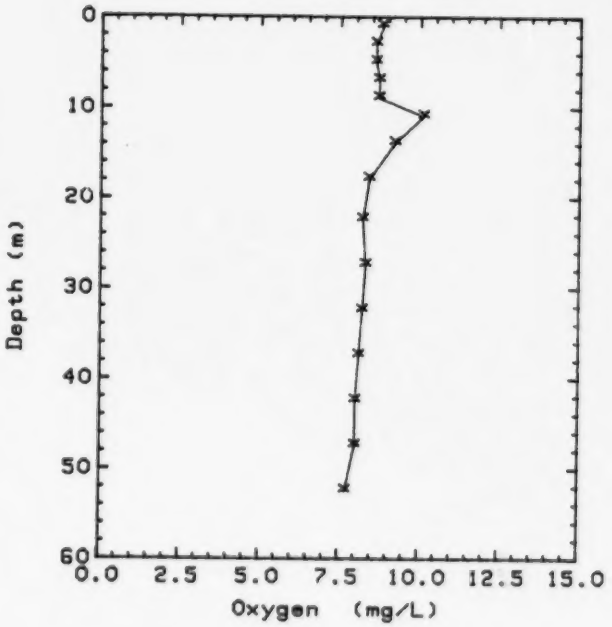
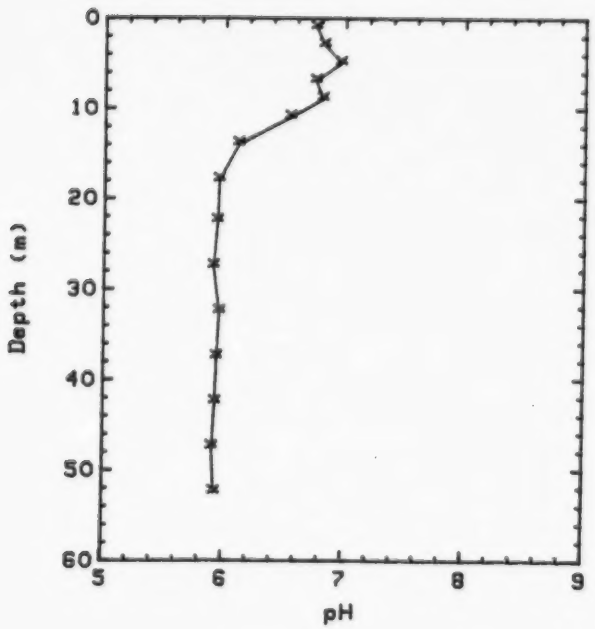



Table 50 con't

# SMOKE LAKE 81.08.31



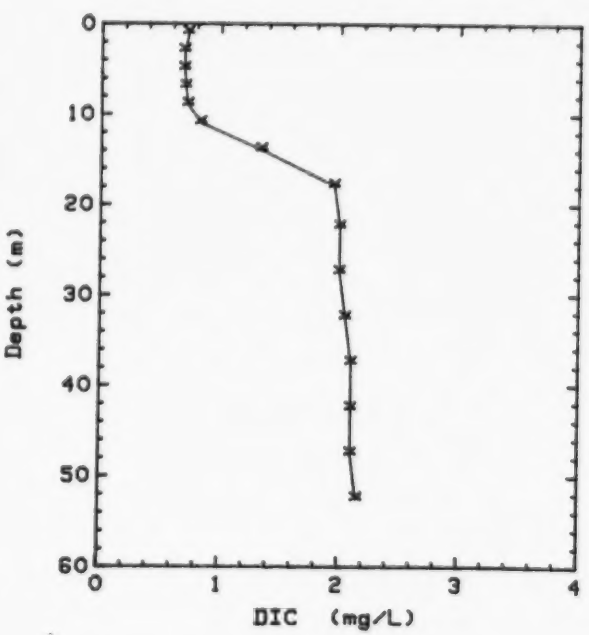
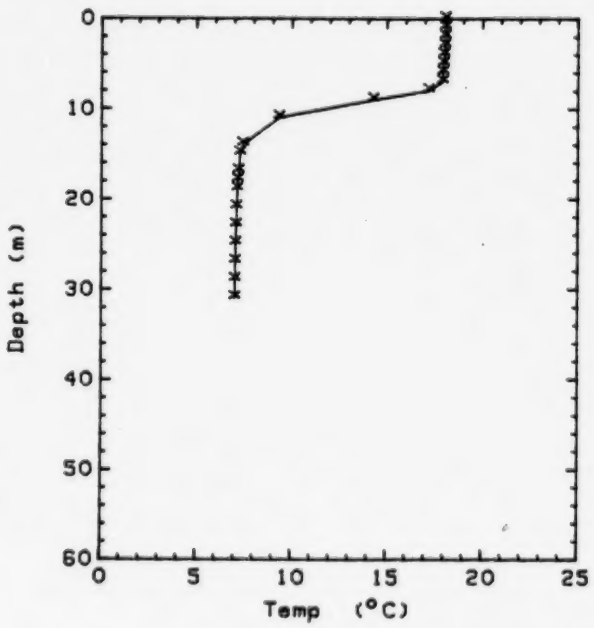
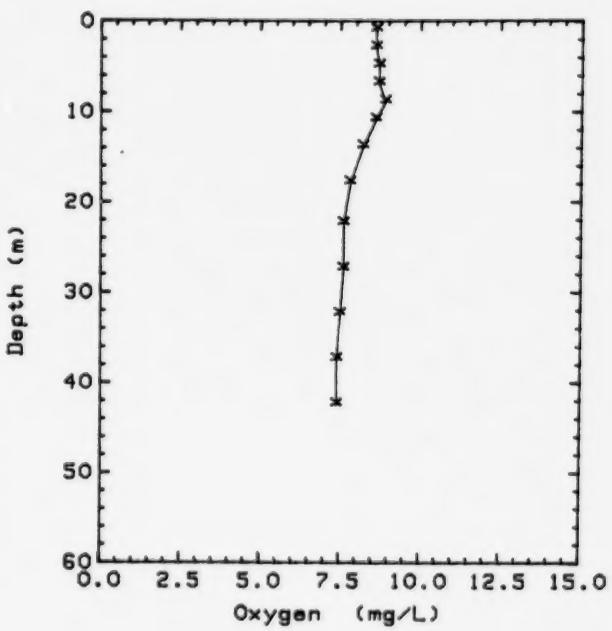
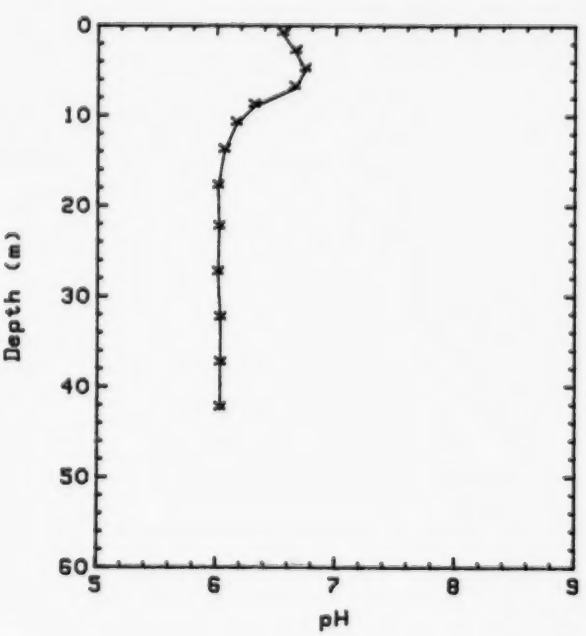



Table 50 con't

# SMOKE LAKE 81.09.16



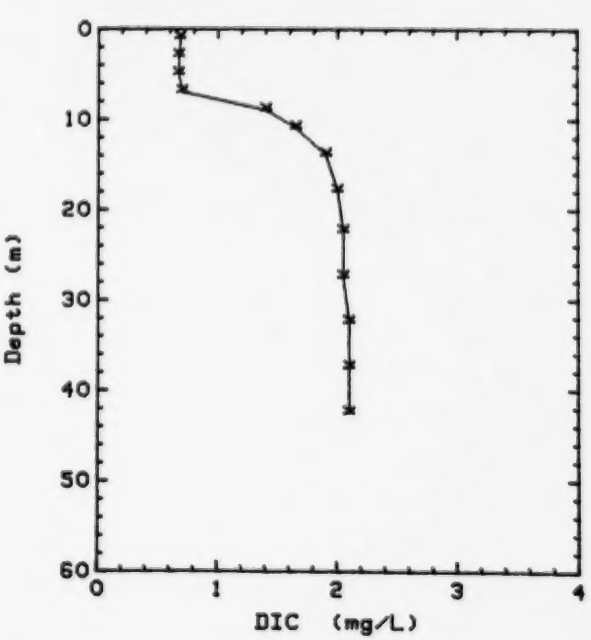
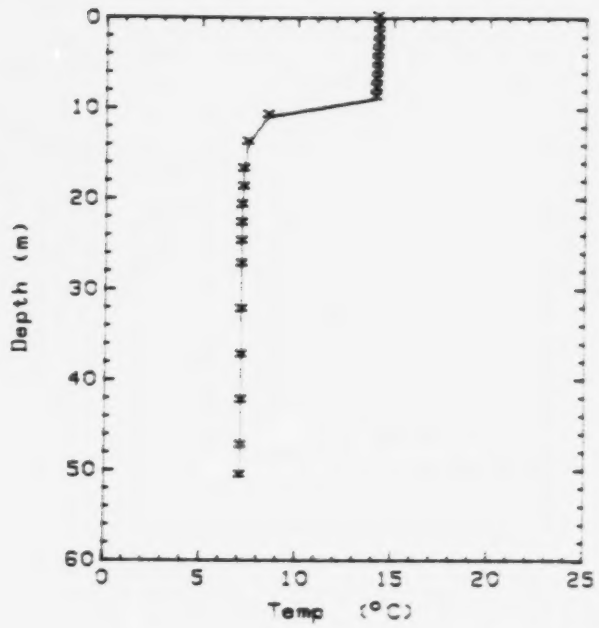
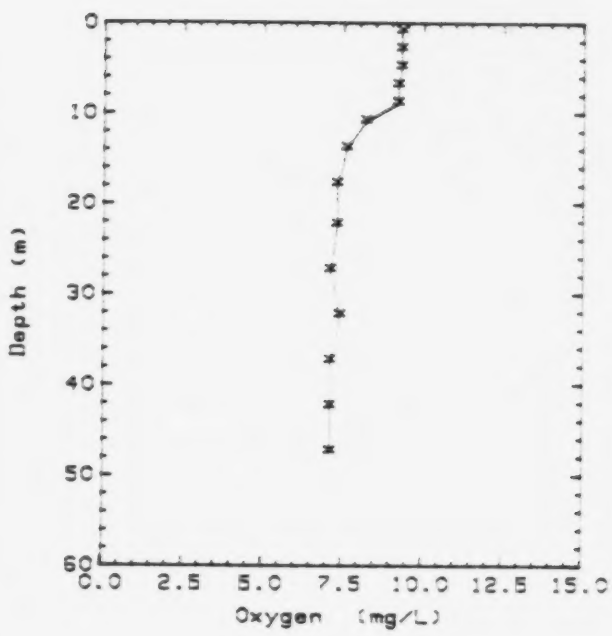
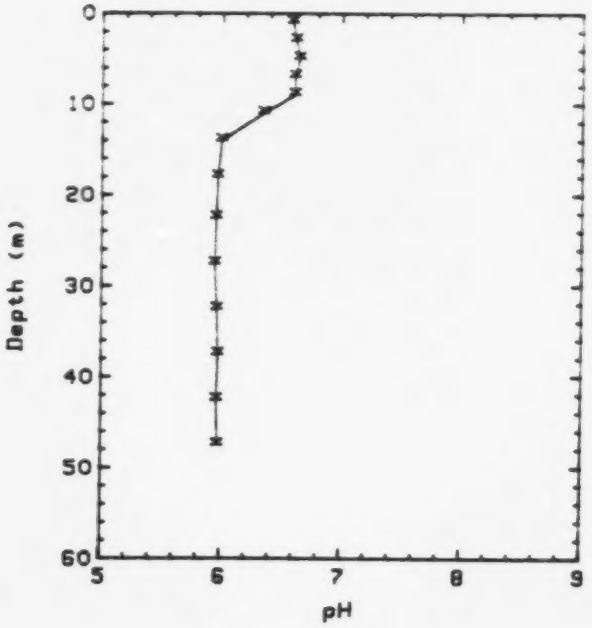



Table 50 con't

# SMOKE LAKE 81.09.28



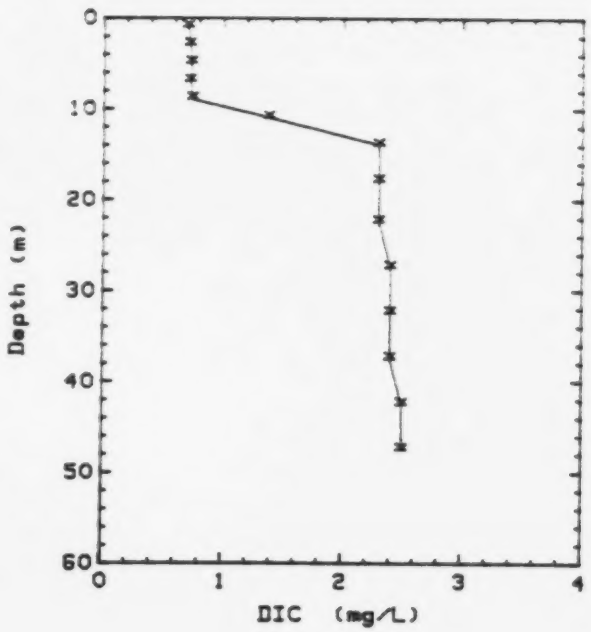
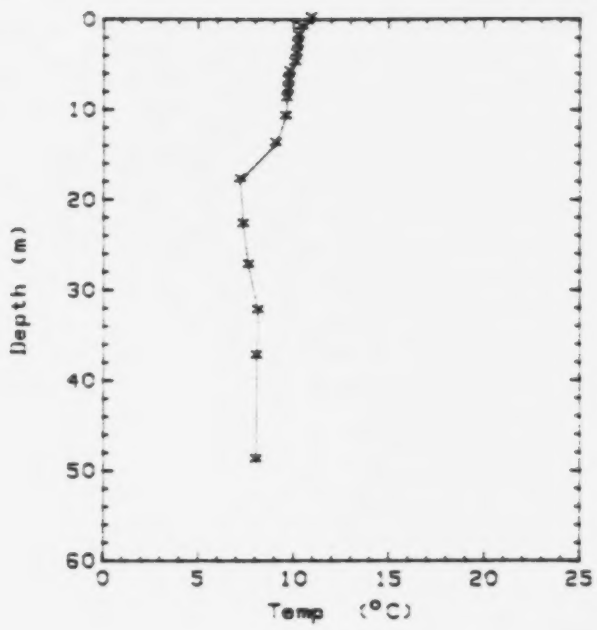
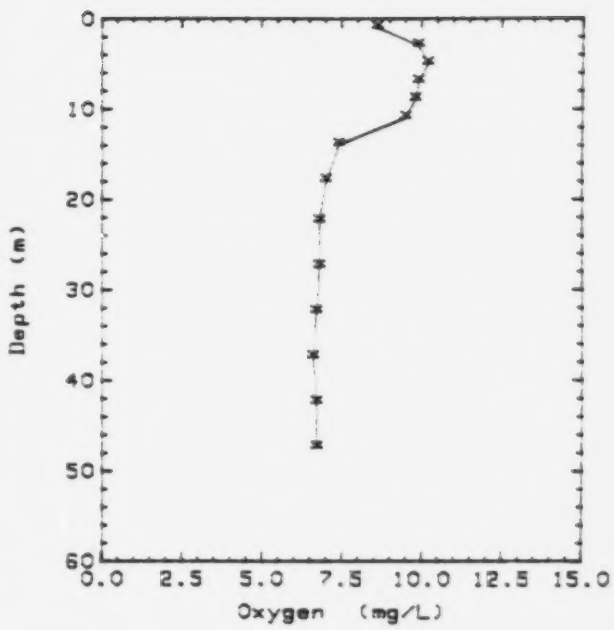
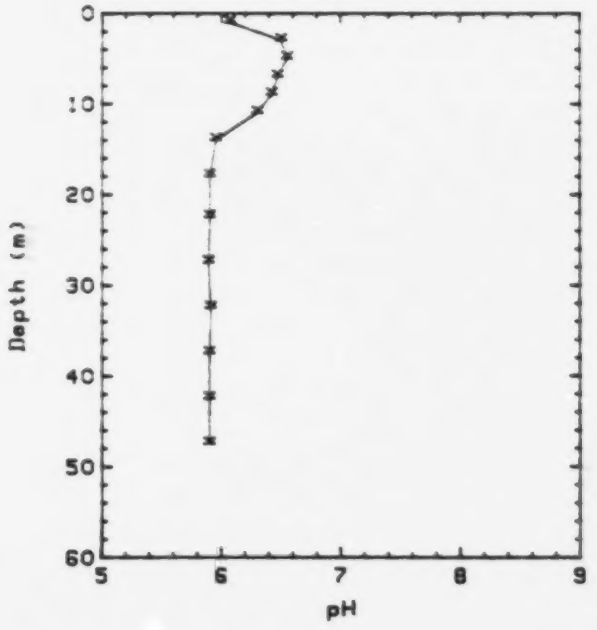



Table 50 con't

# SMOKE LAKE 81.10.13



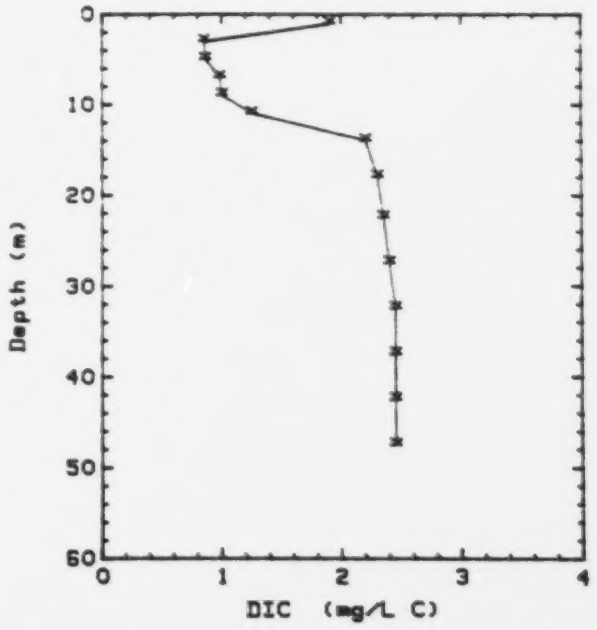
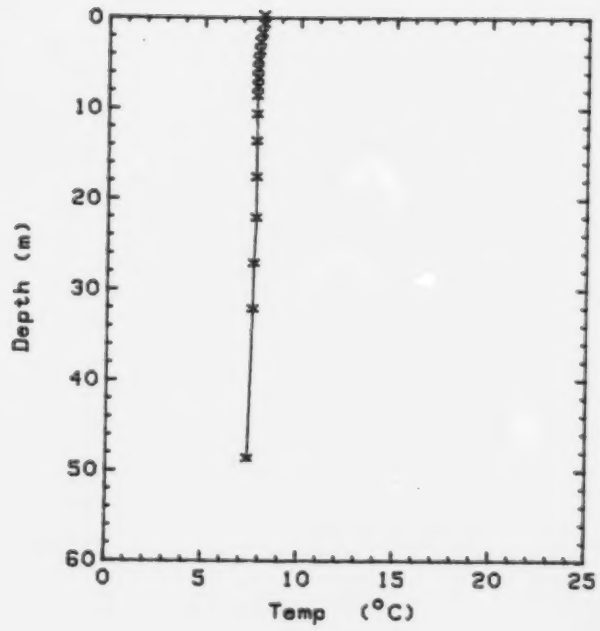
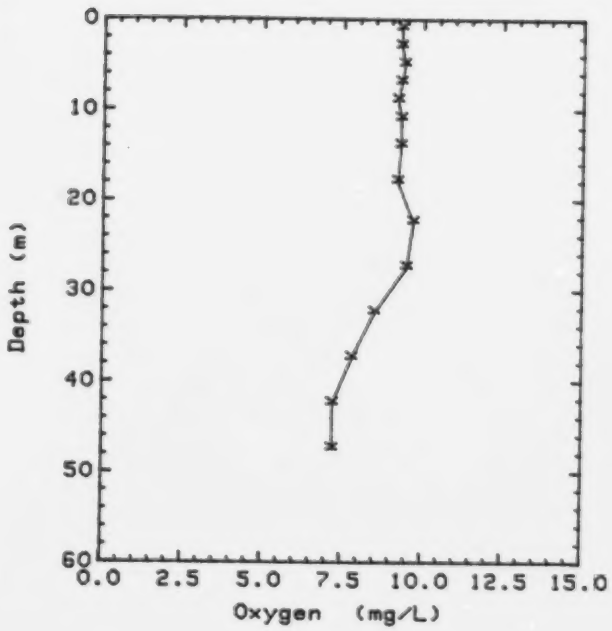
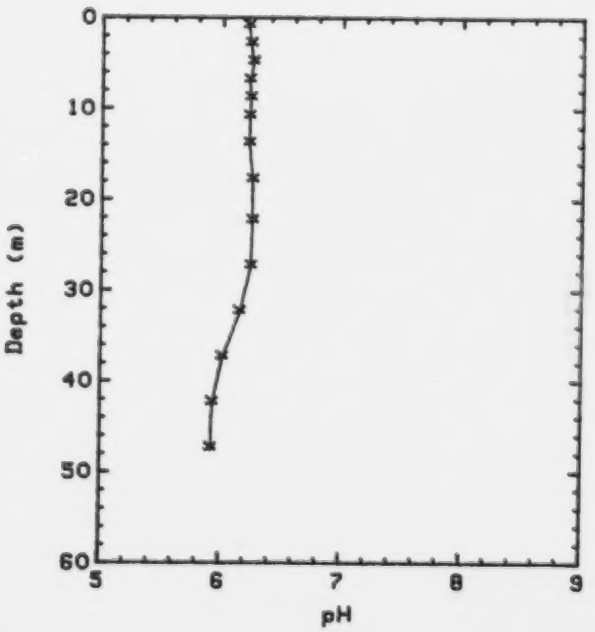



Table 50 con't

# SMOKE LAKE 81.10.29



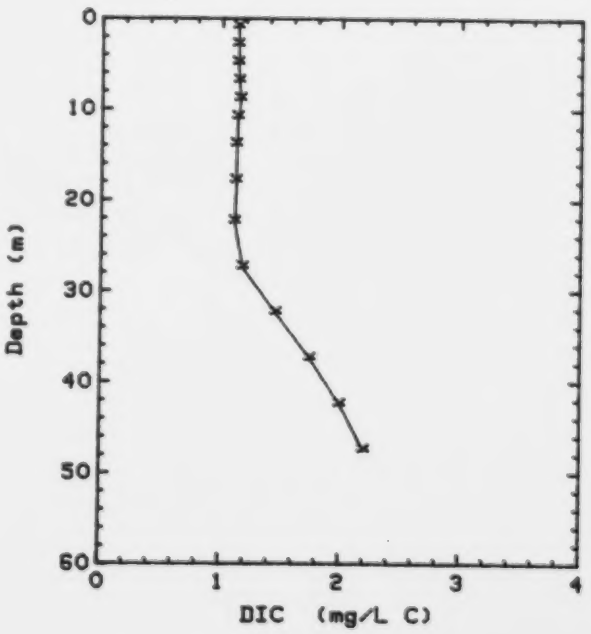
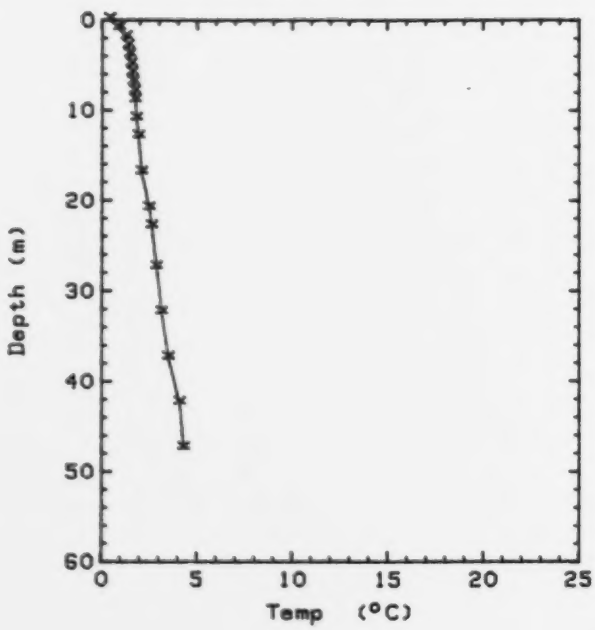
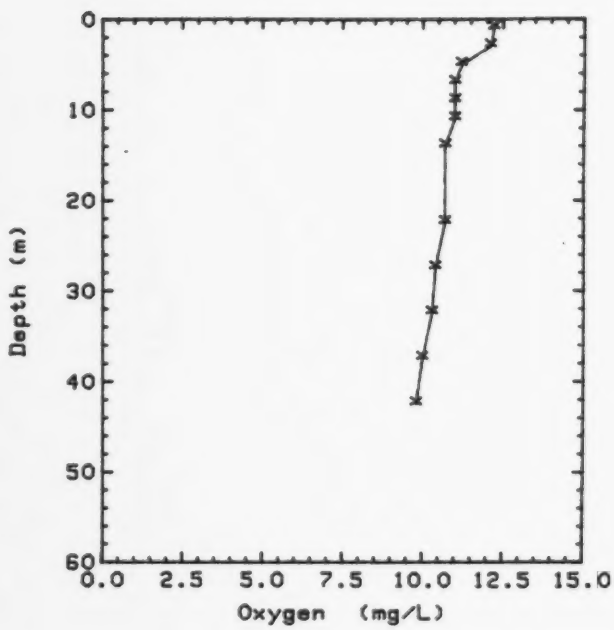
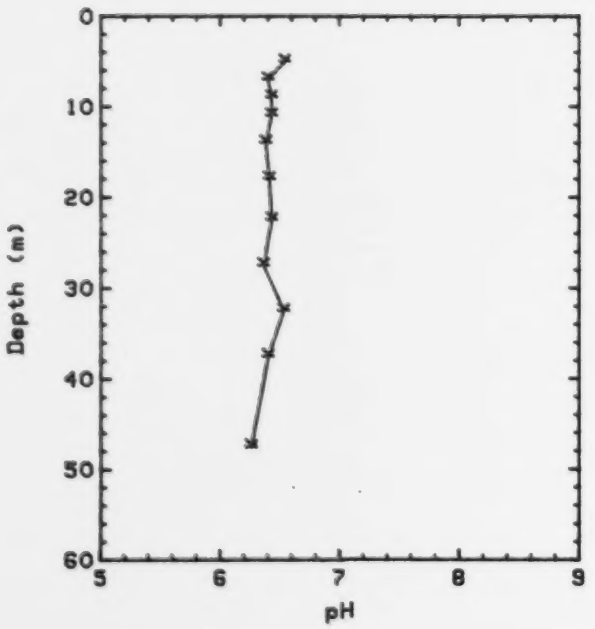



Table 50 con't

# SMOKE LAKE 82.01.25



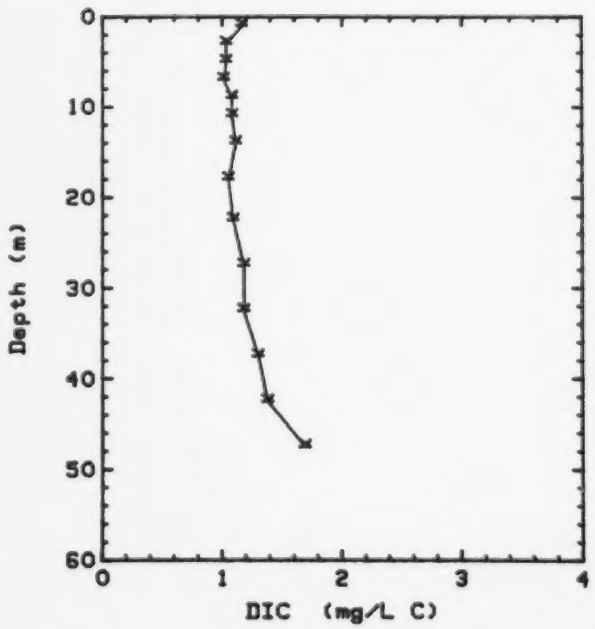
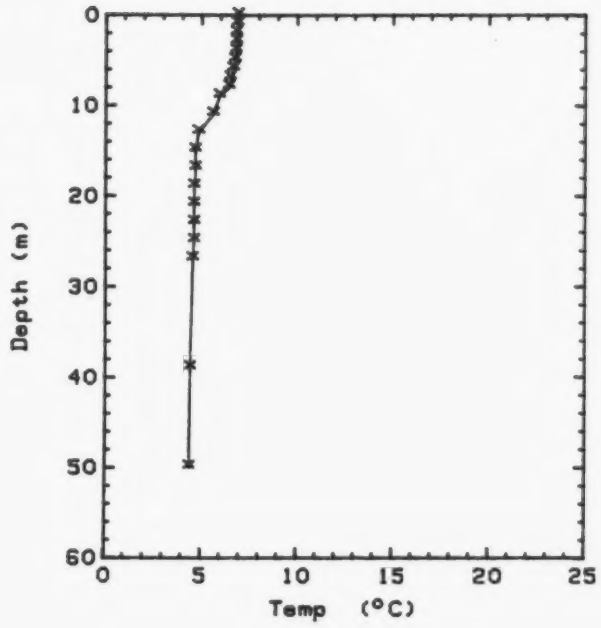
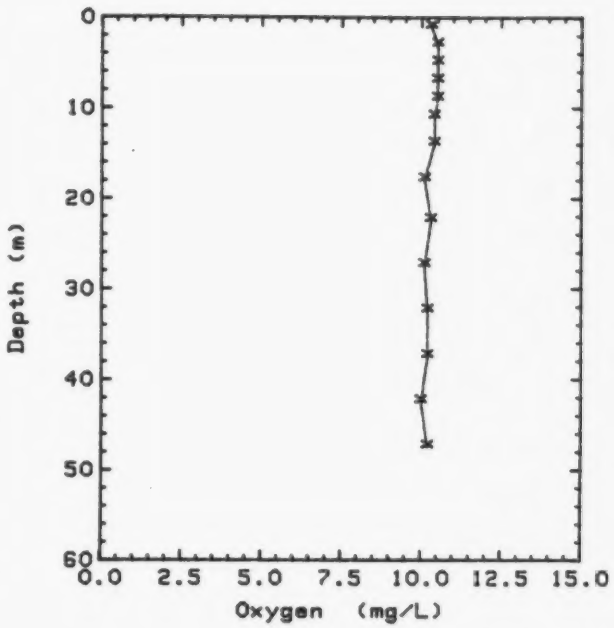



Table 50 con't

# SMOKE LAKE 82.05.10



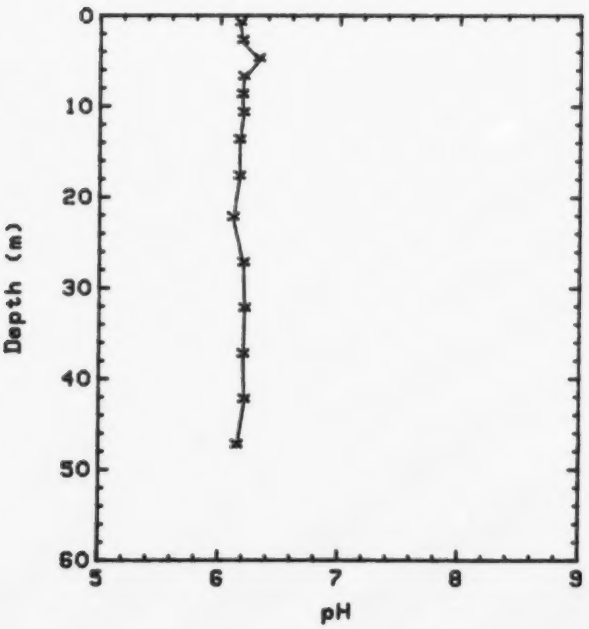
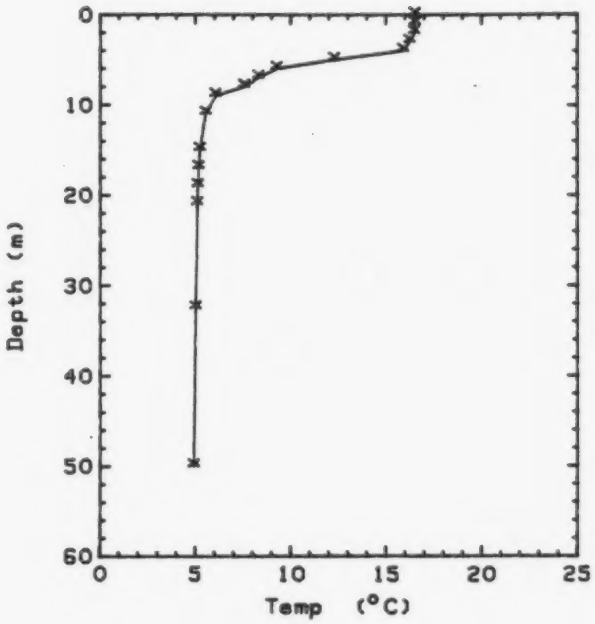
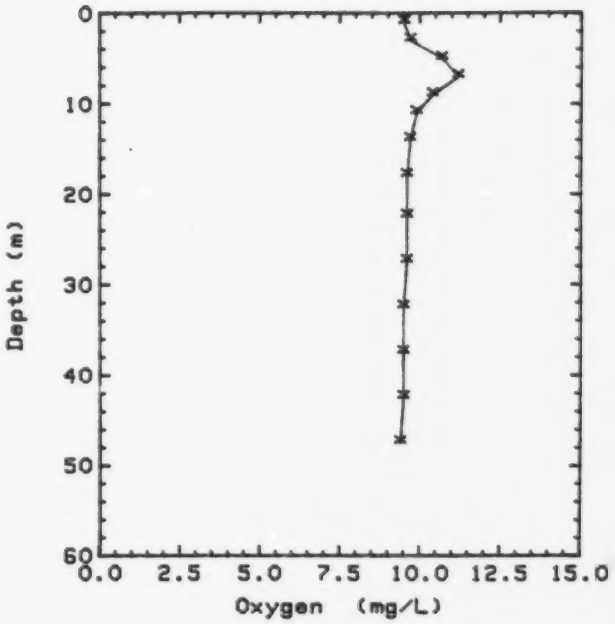
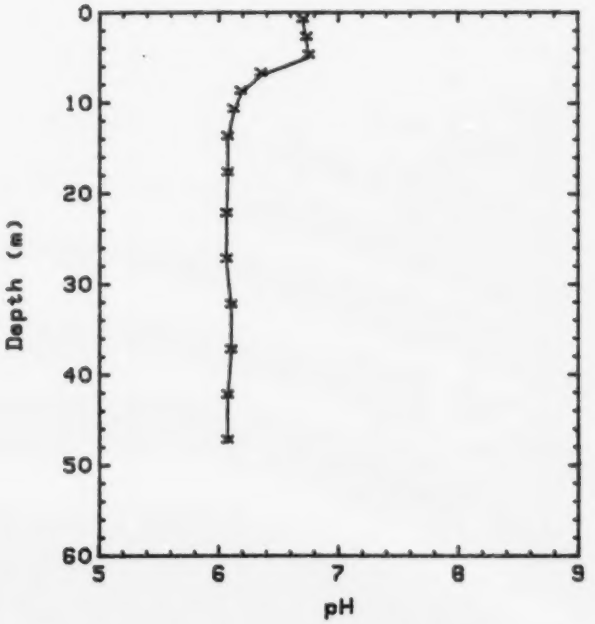



Table 50 con't

# SMOKE LAKE 82.06.07



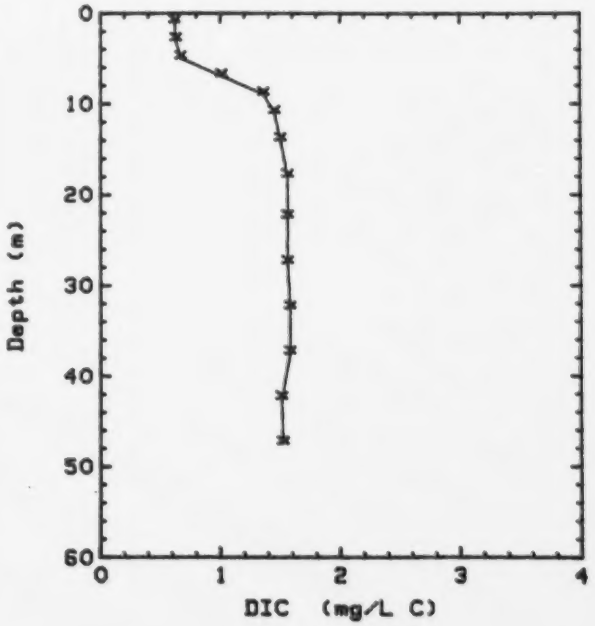
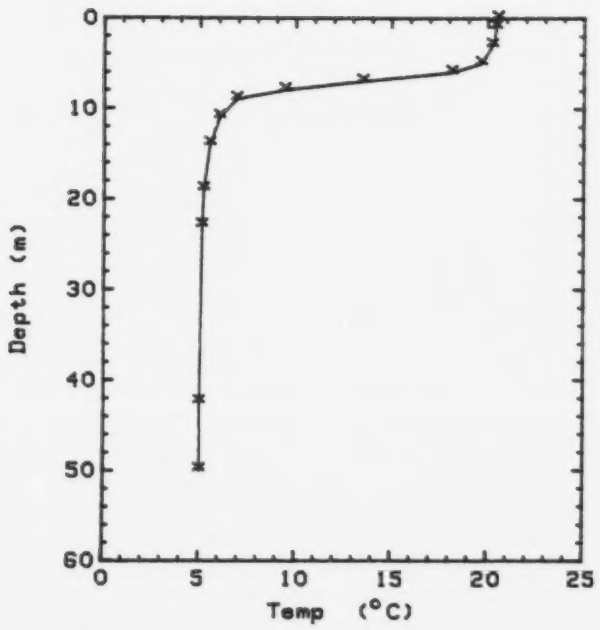
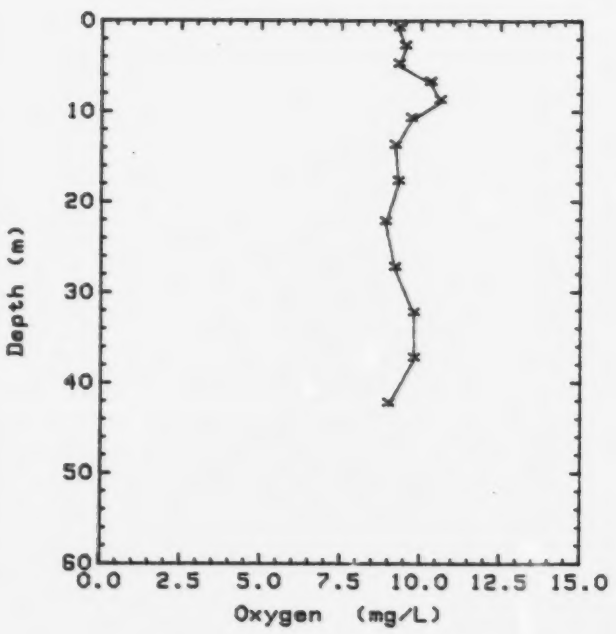
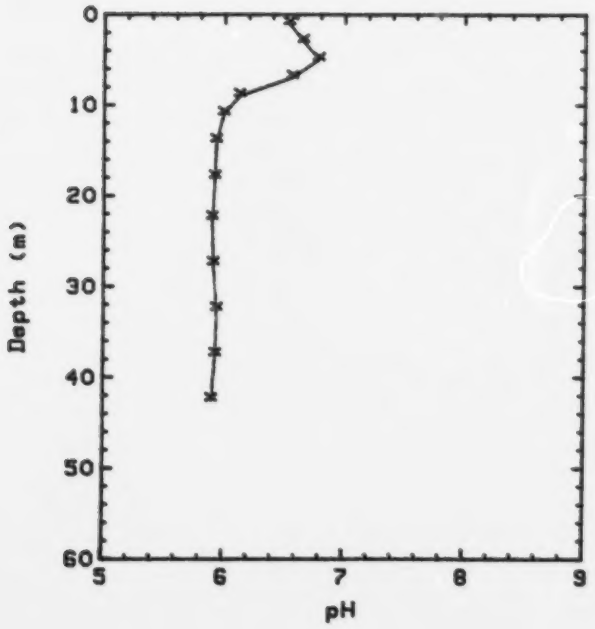



Table 50 con't

# SMOKE LAKE 82.07.07



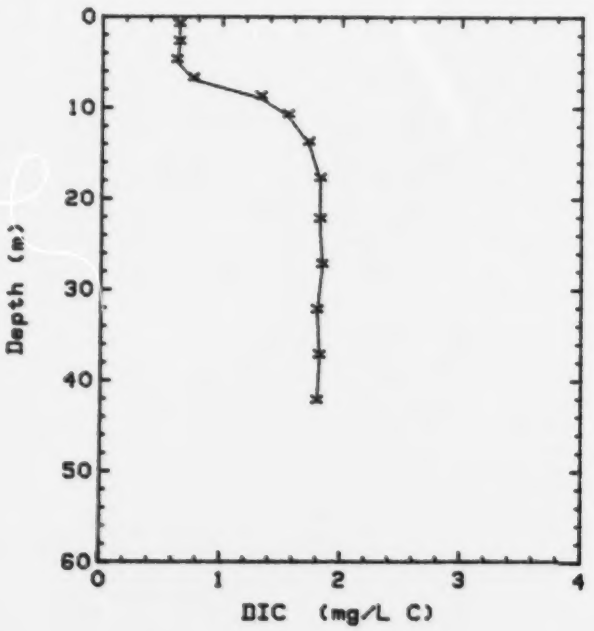
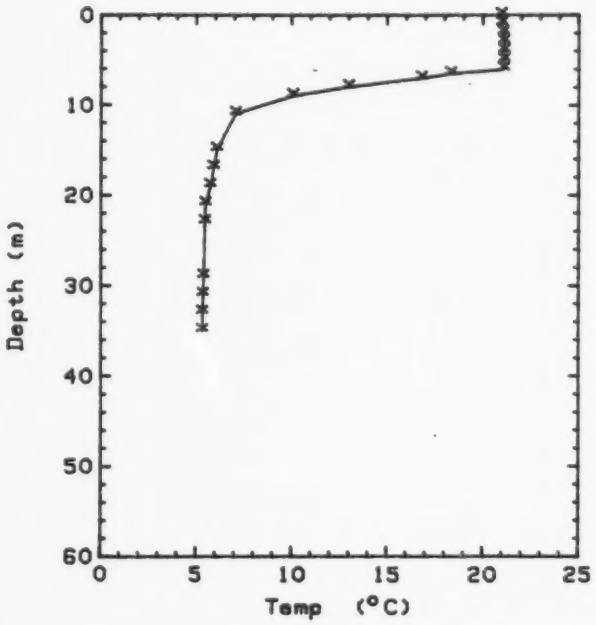
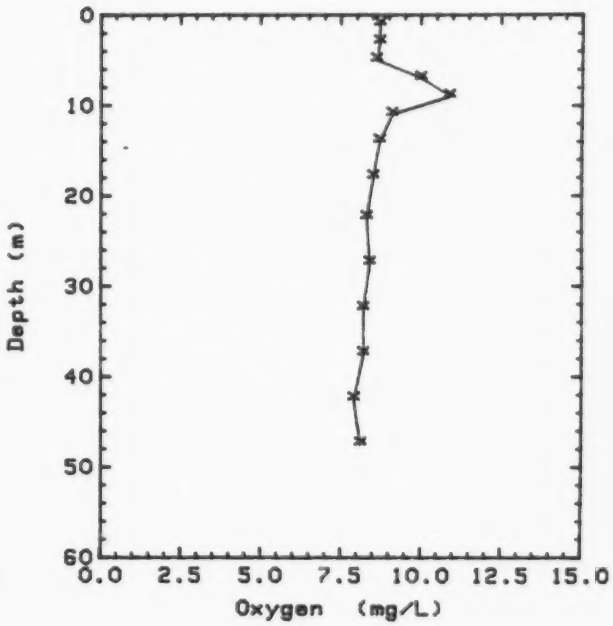
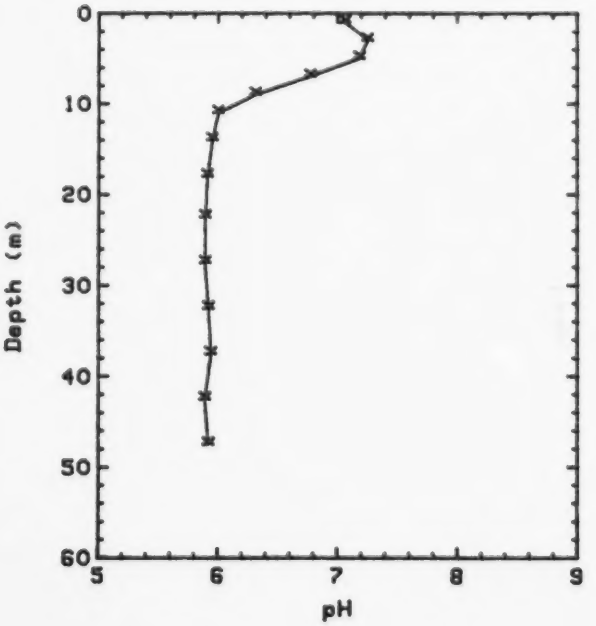



Table 50 con't

# SMOKE LAKE 82.08.03



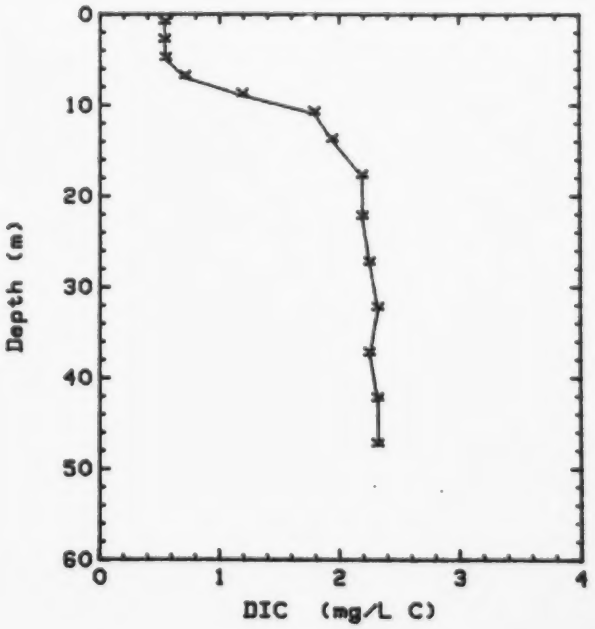
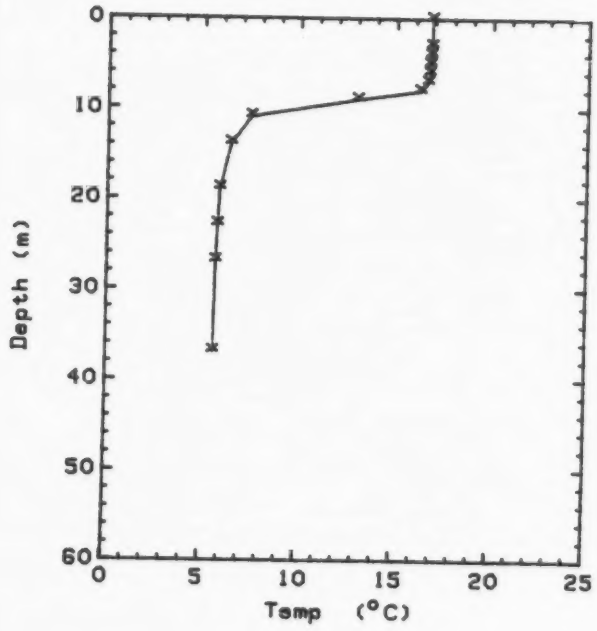
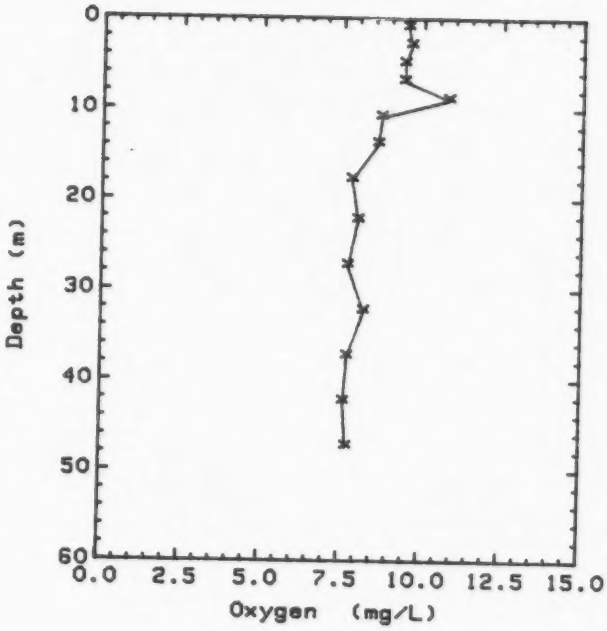
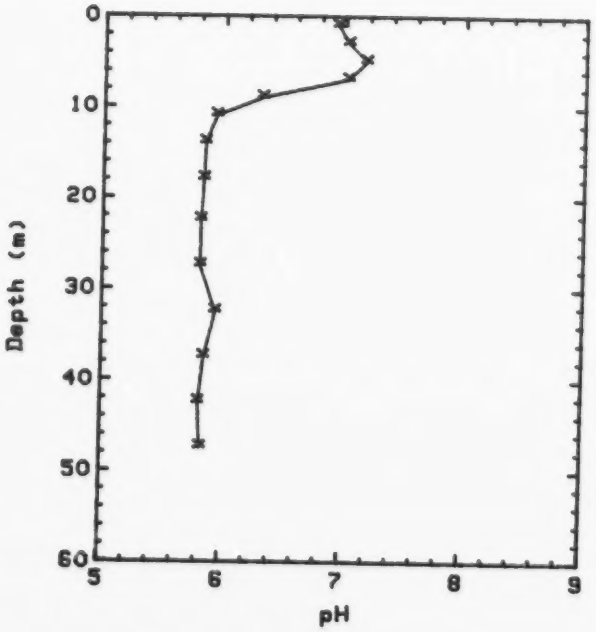



Table 50 con't

# SMOKE LAKE 82.09.01



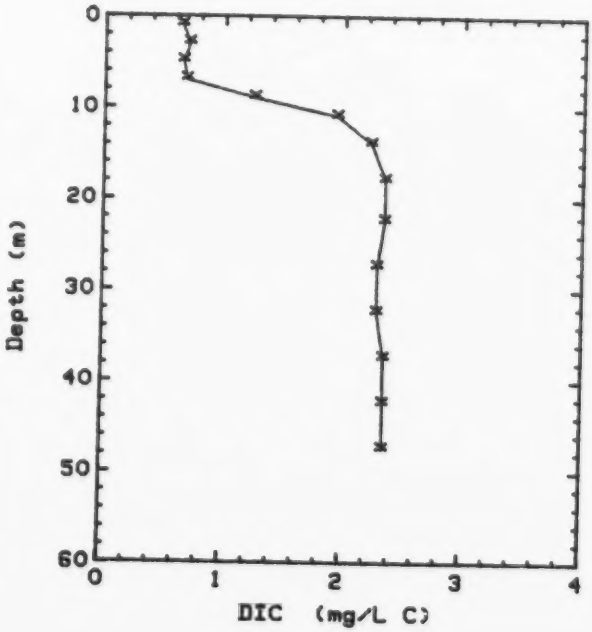
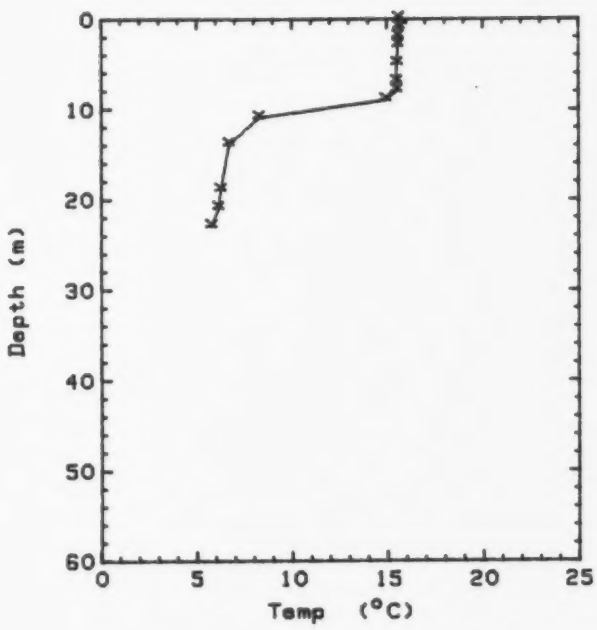
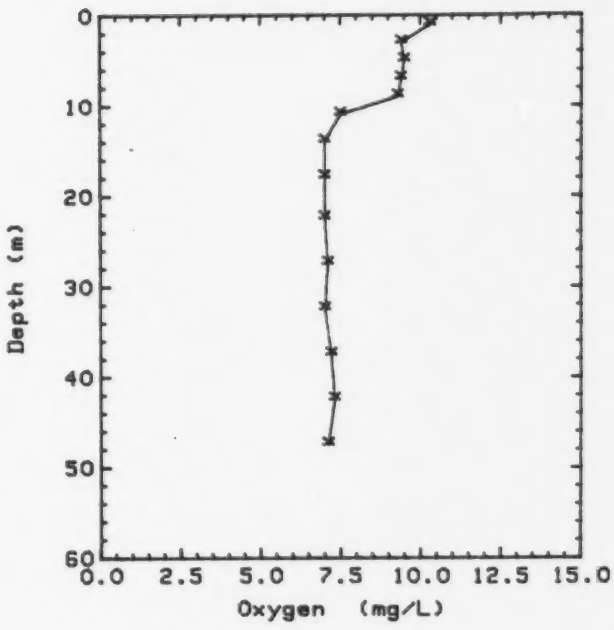
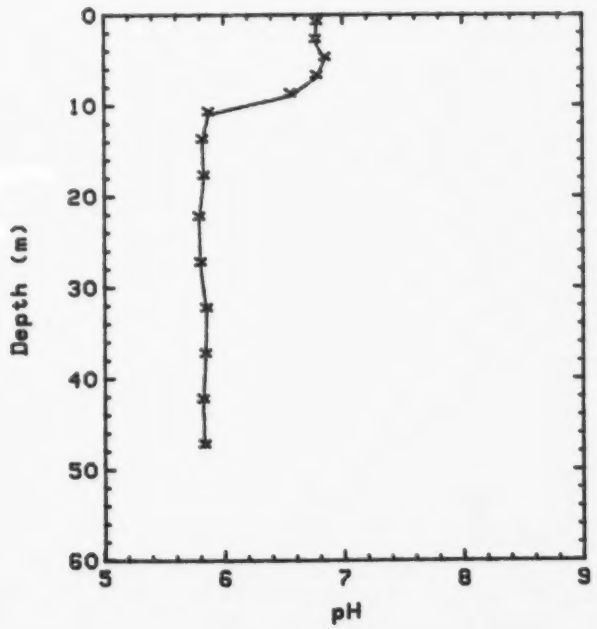



Table 50 con't

# SMOKE LAKE 82.09.28



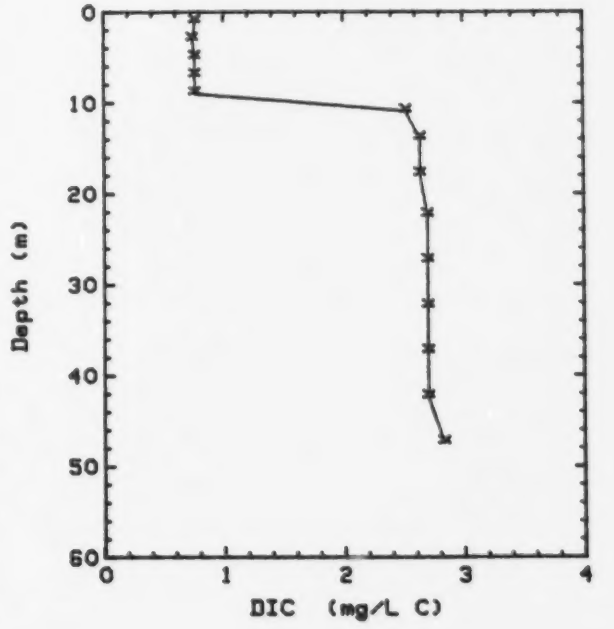
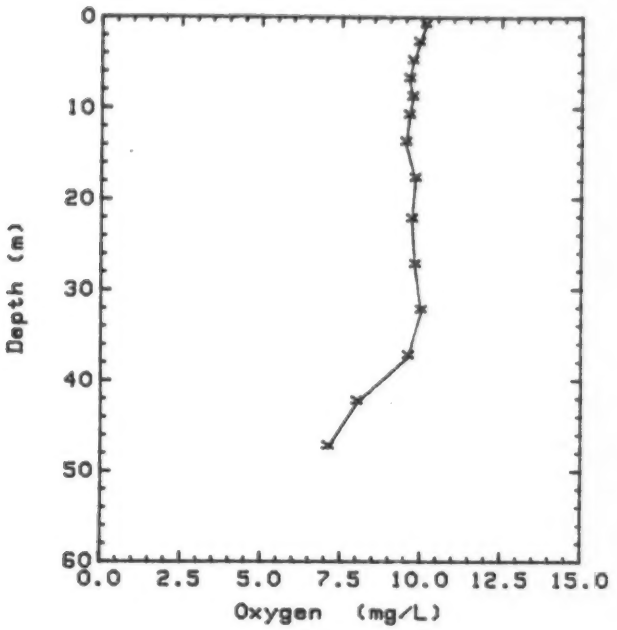
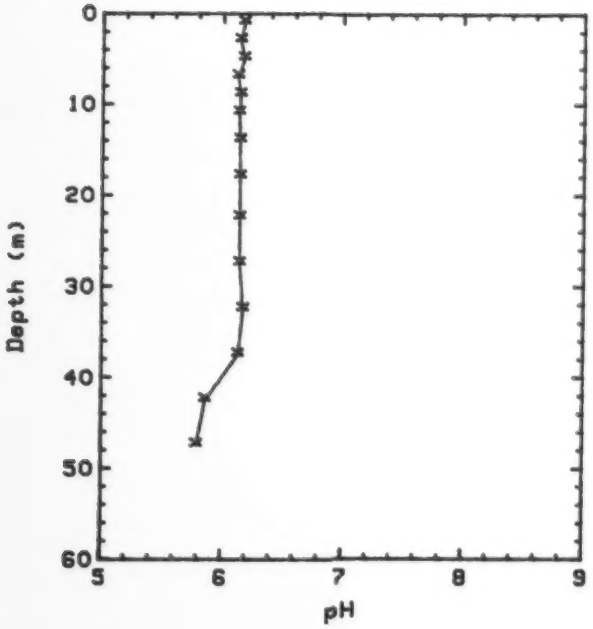



Table 50 con't

# SMOKE LAKE 82.11.15



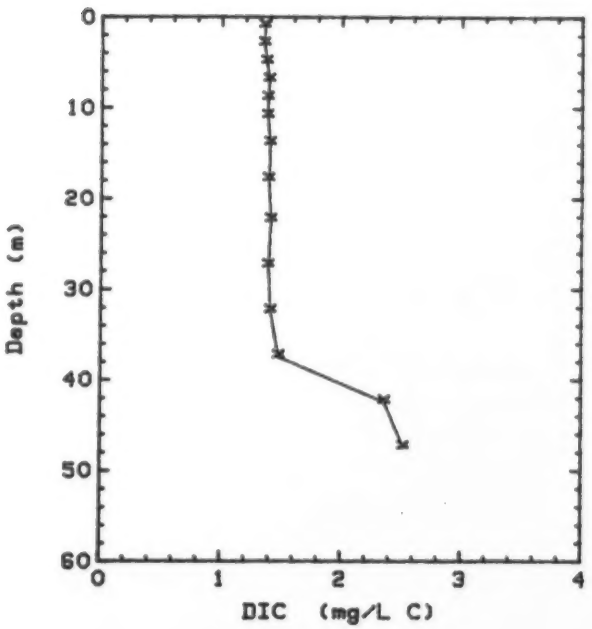
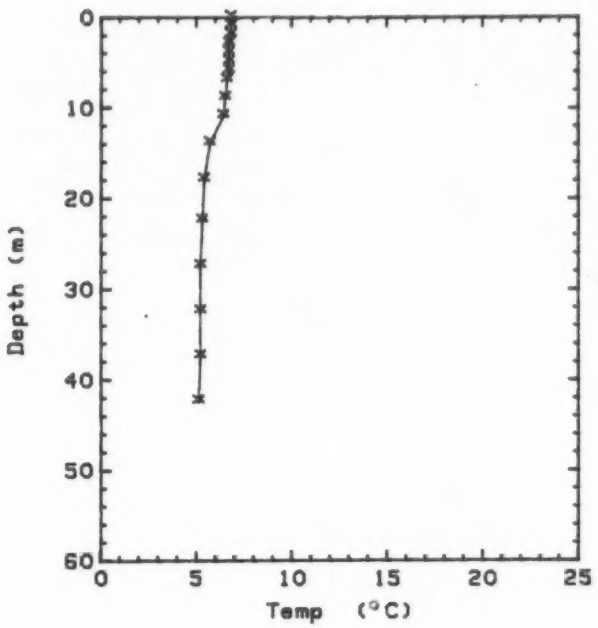
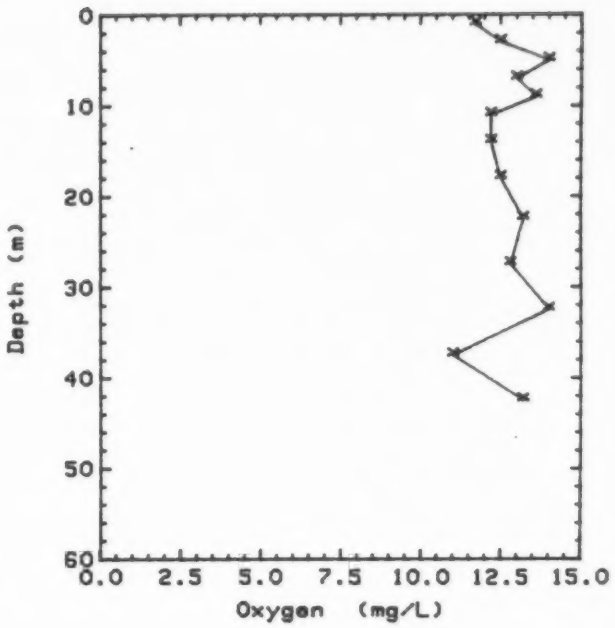
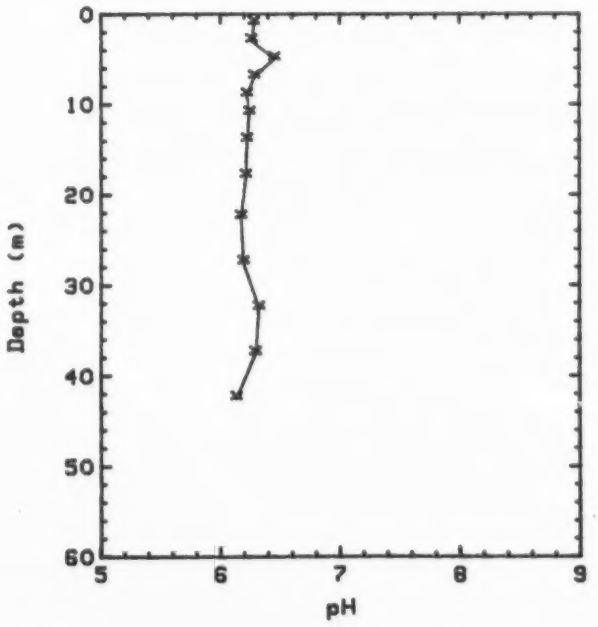



Table 50 con't

# SMOKE LAKE 83.05.16



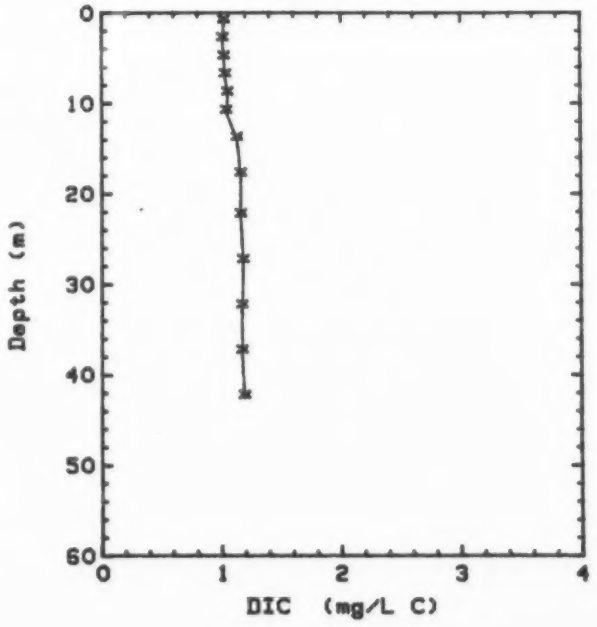
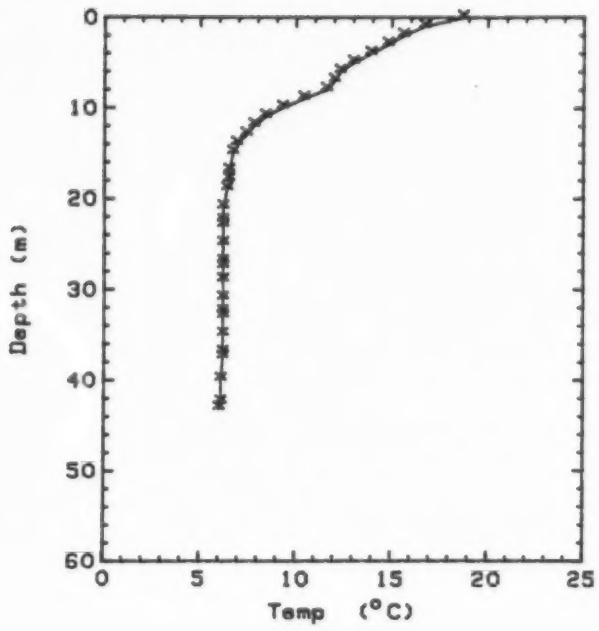
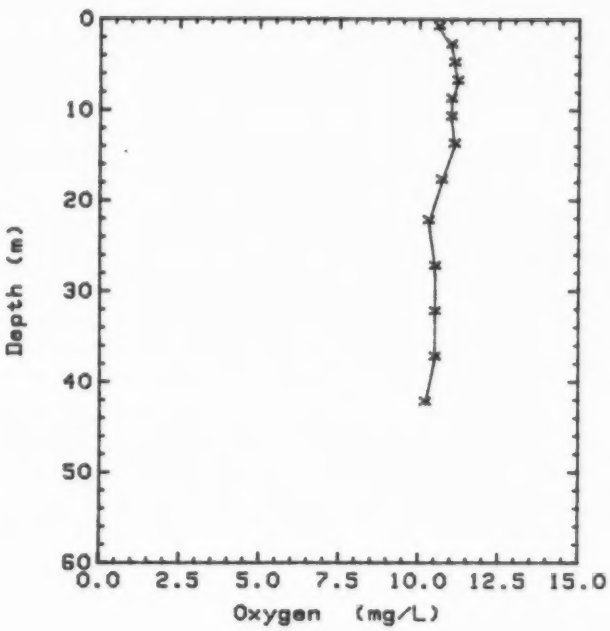
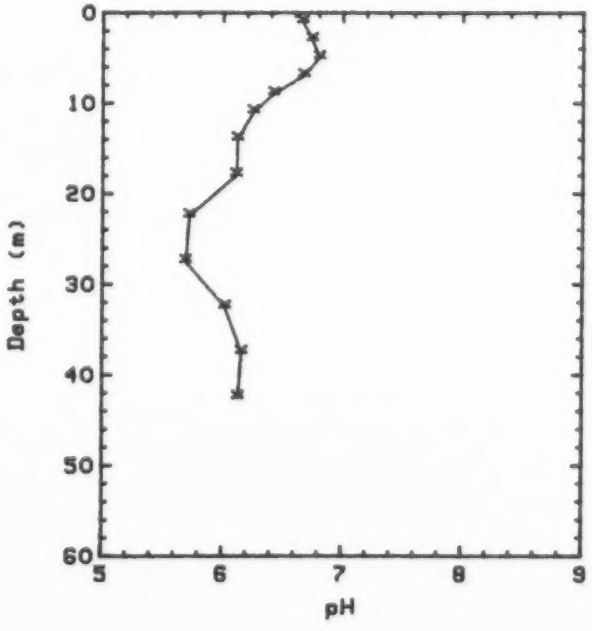



Table 50 con't

# SMOKE LAKE 83.06.13



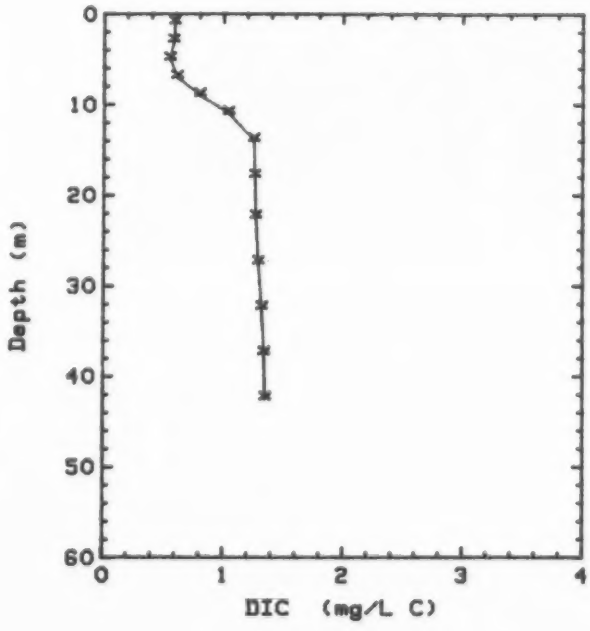
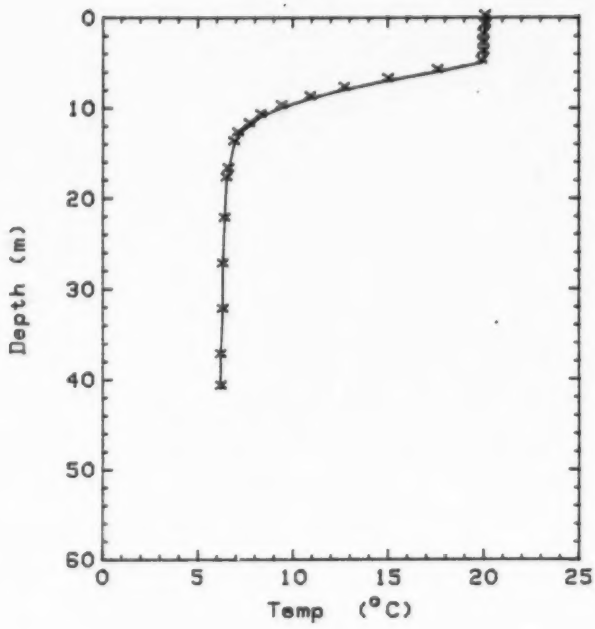
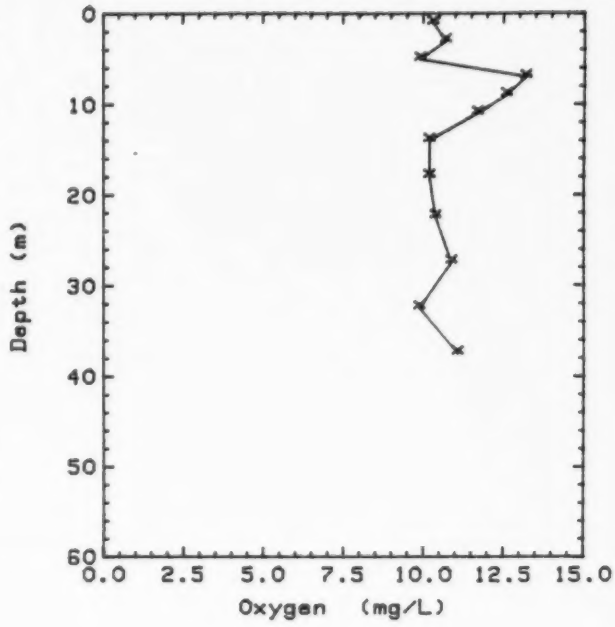
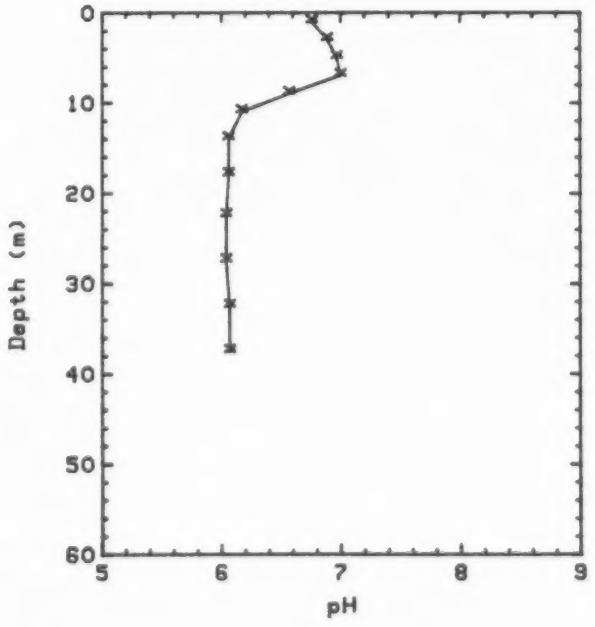



Table 50 con't

# SMOKE LAKE 83.07.11



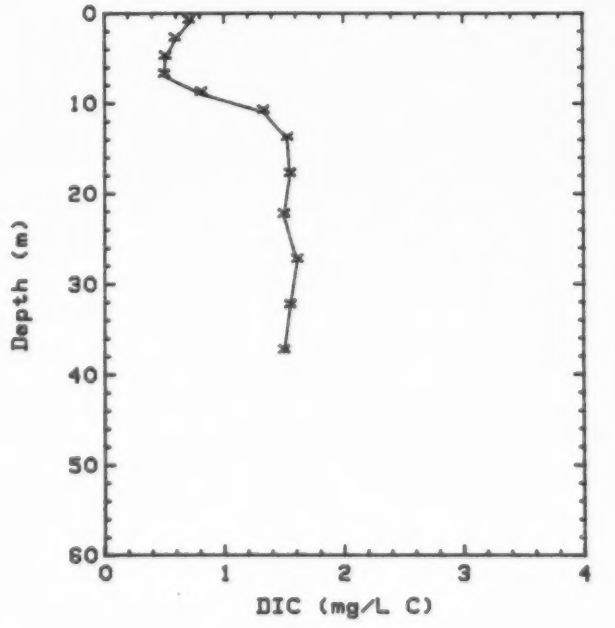
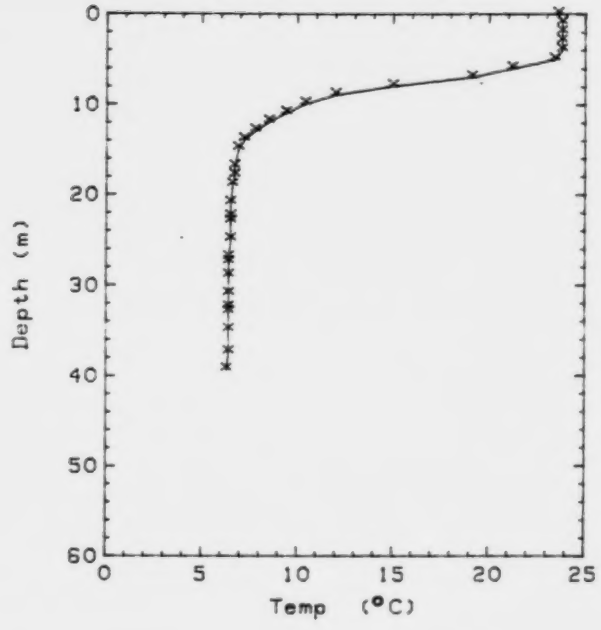
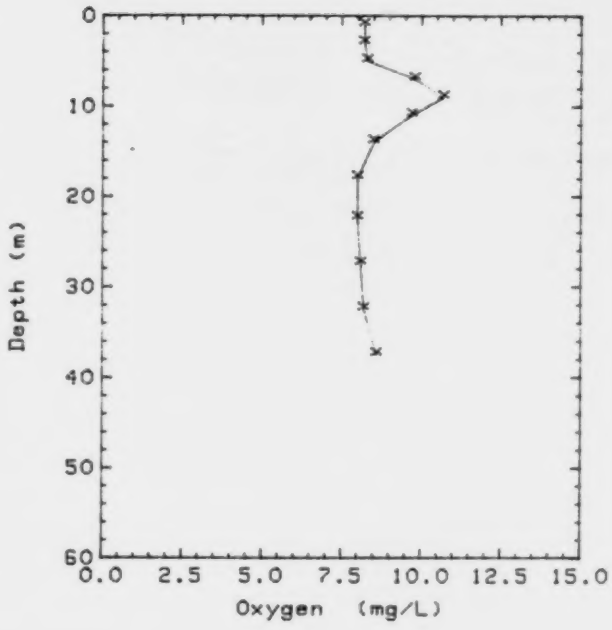
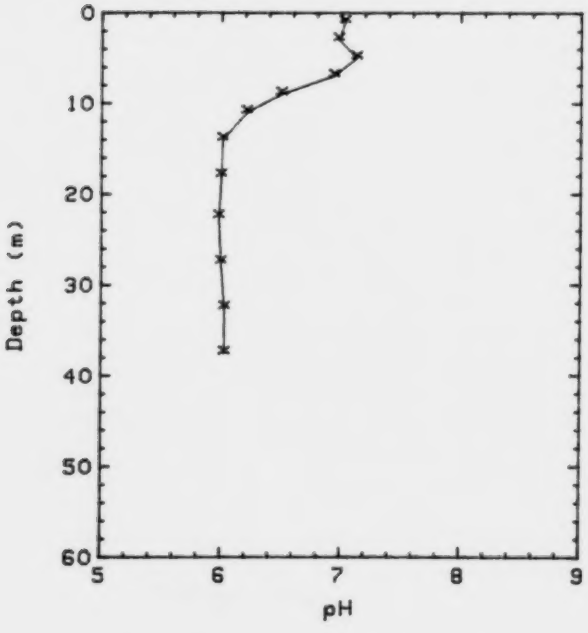



Table 50 con't

SMOKE LAKE 83.08.08



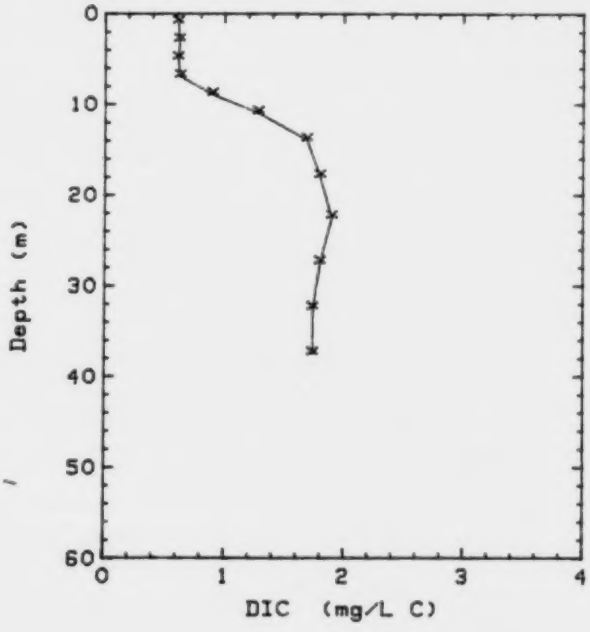
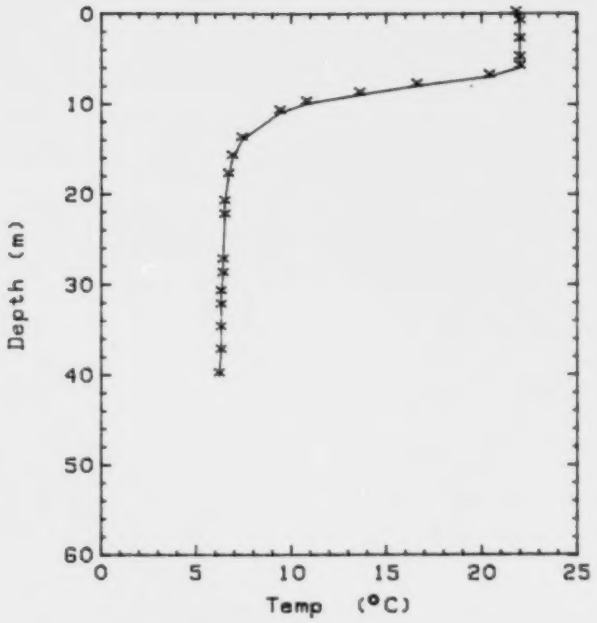
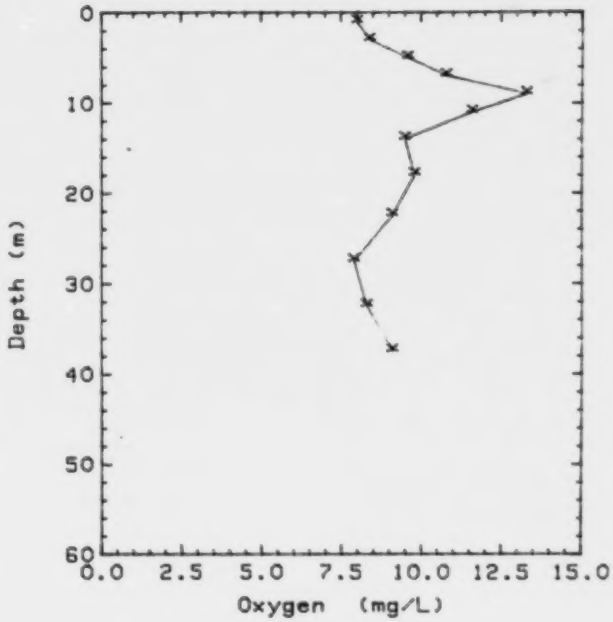
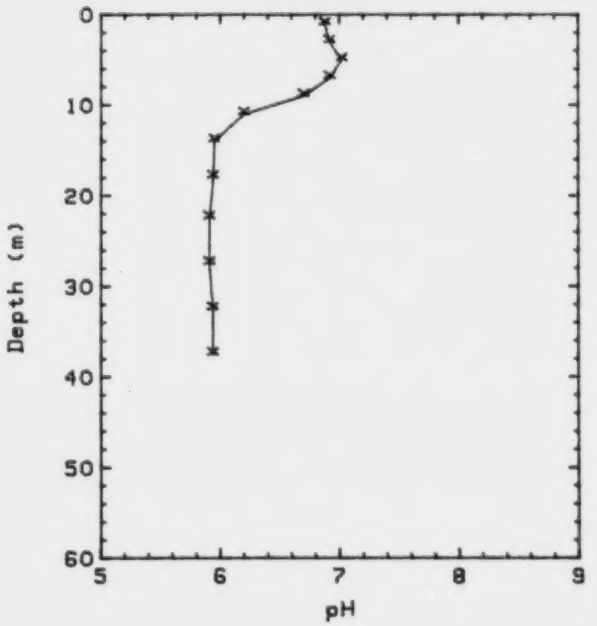



Table 50 con't

# SMOKE LAKE 83.09.07



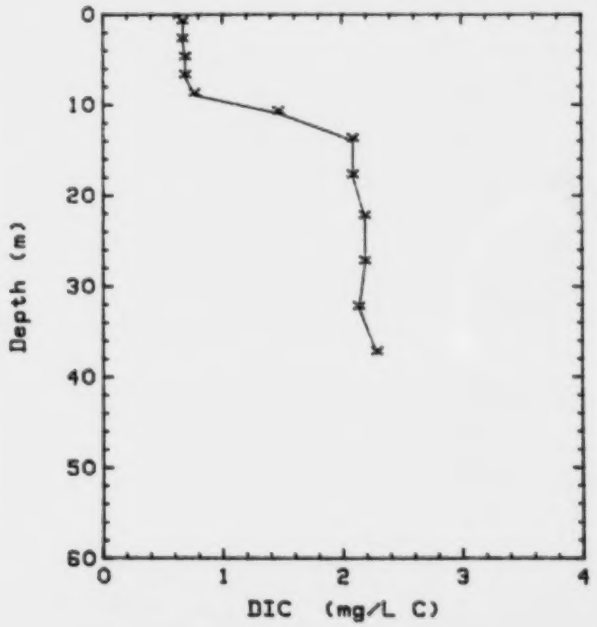
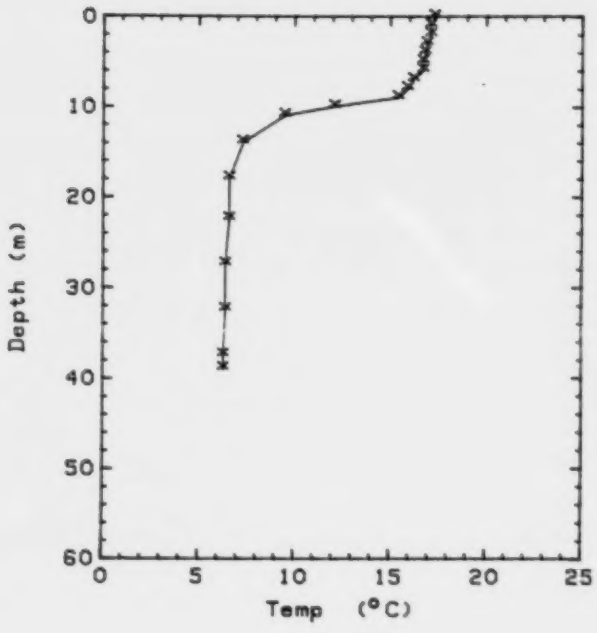
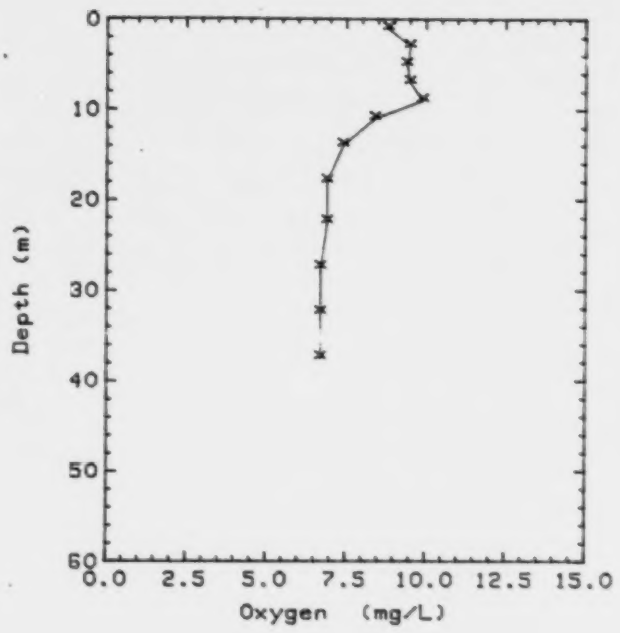
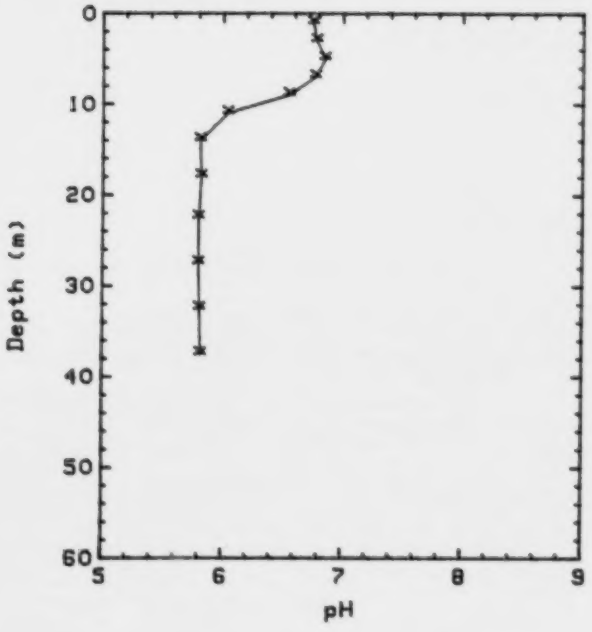



Table 50 con't

# SMOKE LAKE 83.10.03



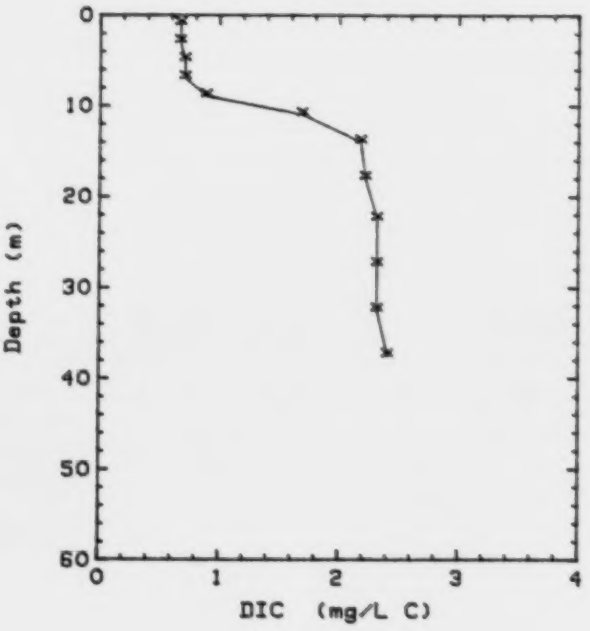
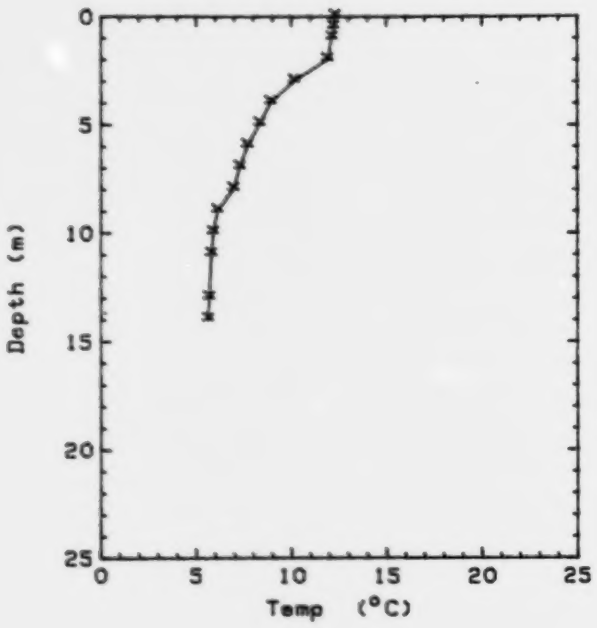
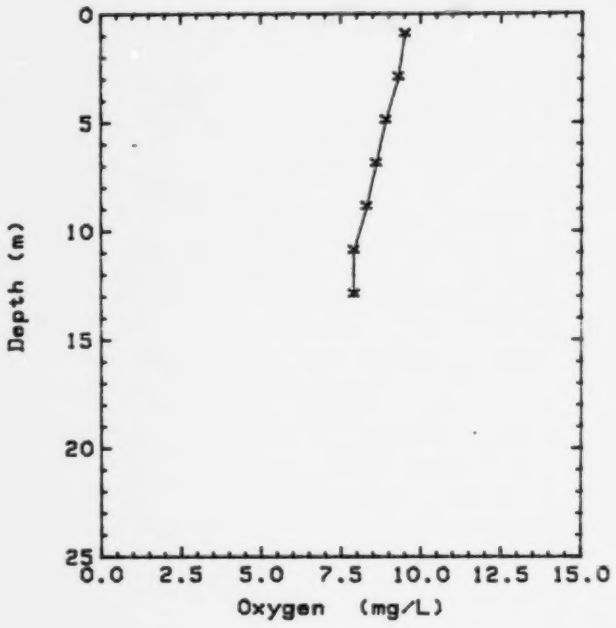
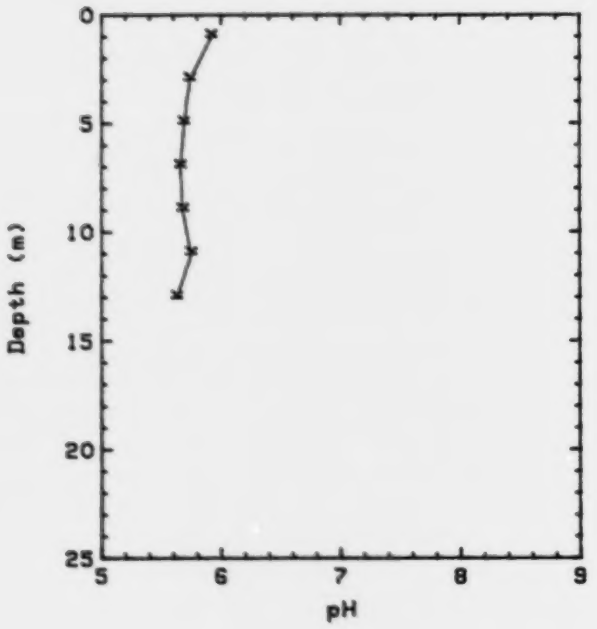



Table 51 Timberwolf Lake

# TIMBERWOLF LAKE 82.05.11



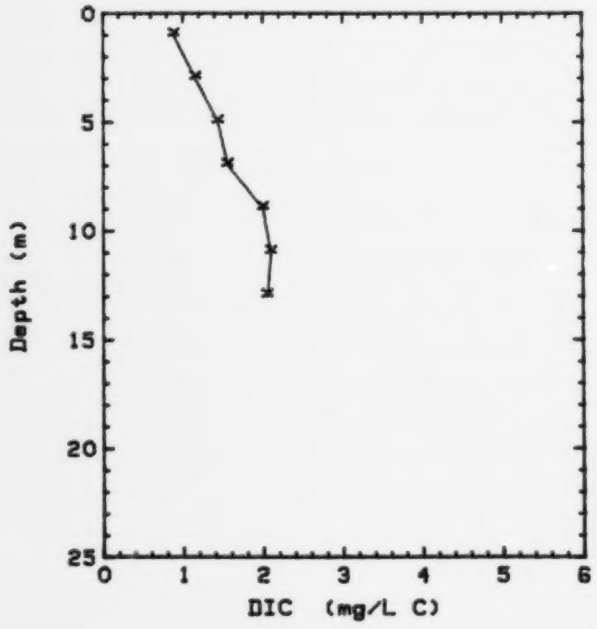
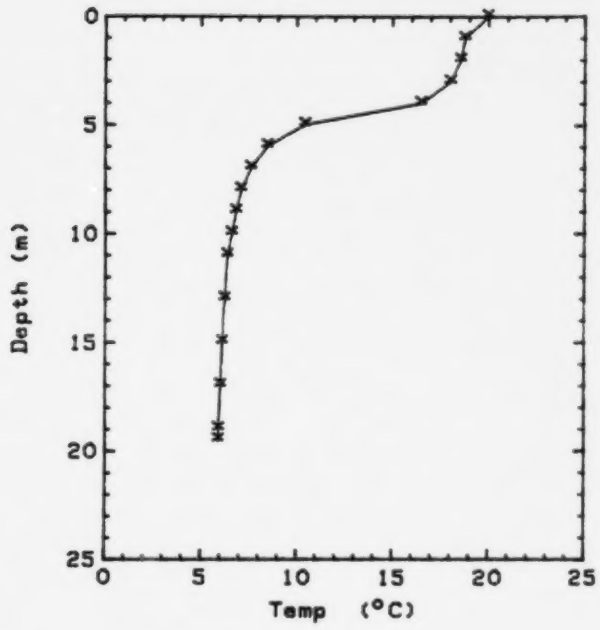
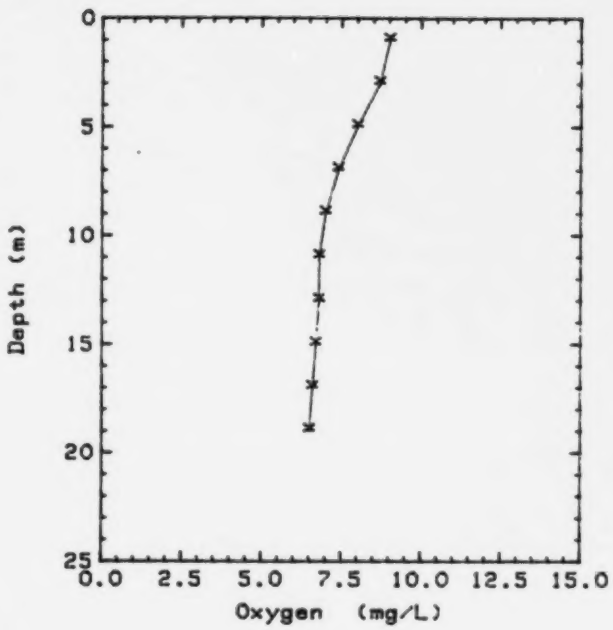
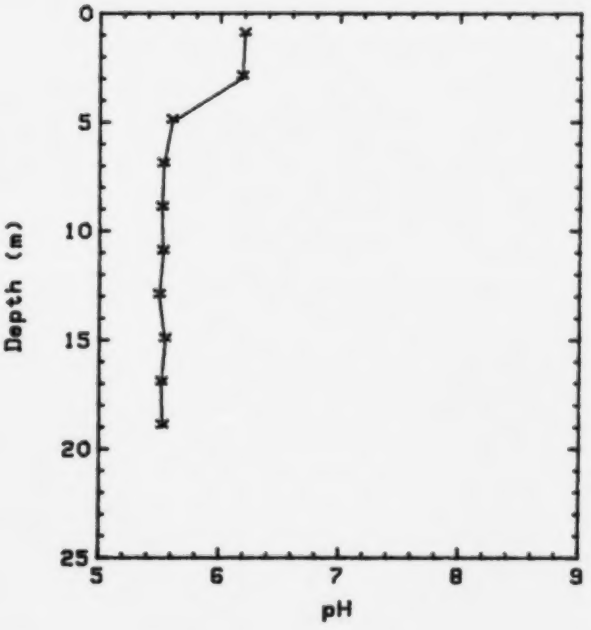



Table 51 con't

# TIMBERWOLF LAKE 82.06.09



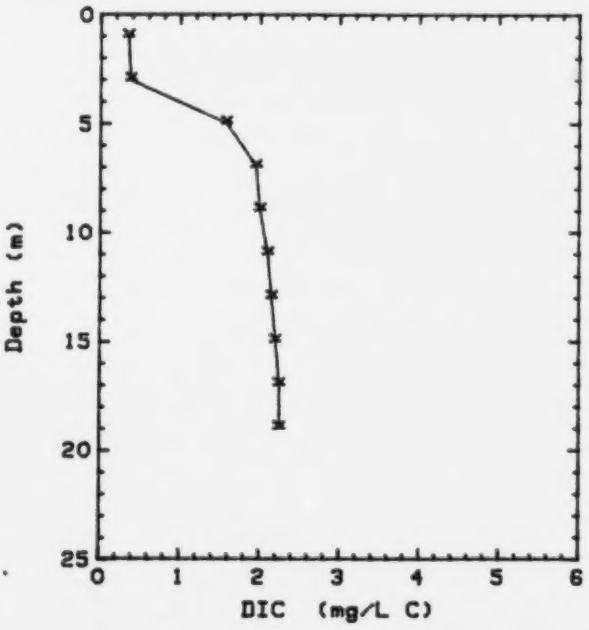
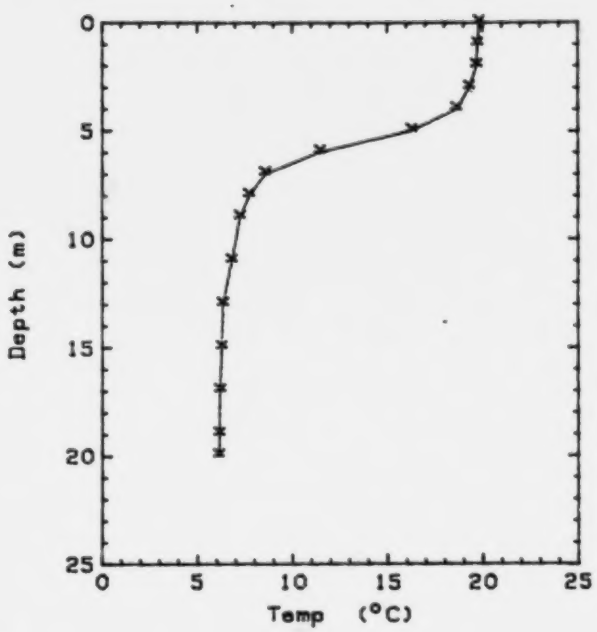
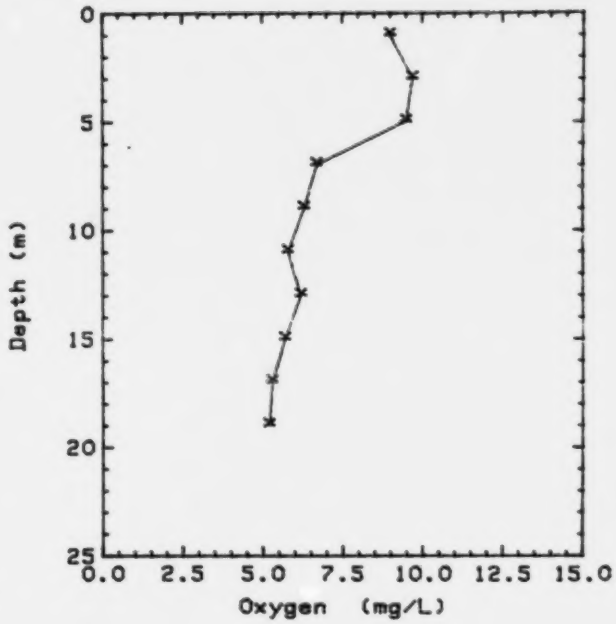
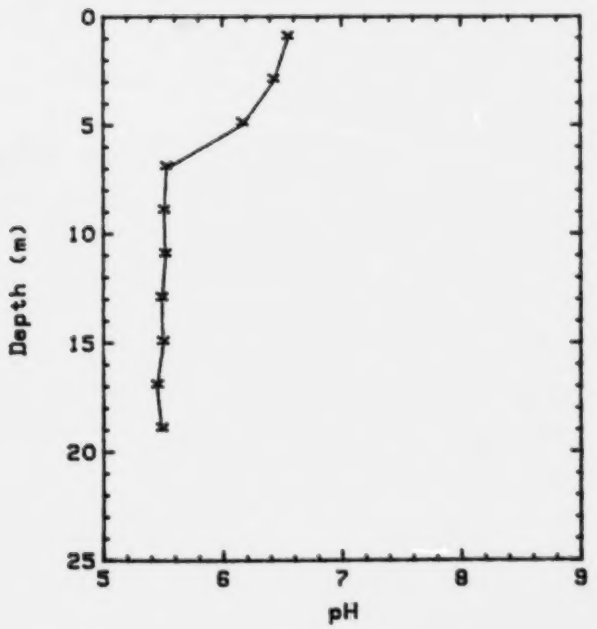



Table 51 con't

TIMBERWOLF LAKE 82.07.06



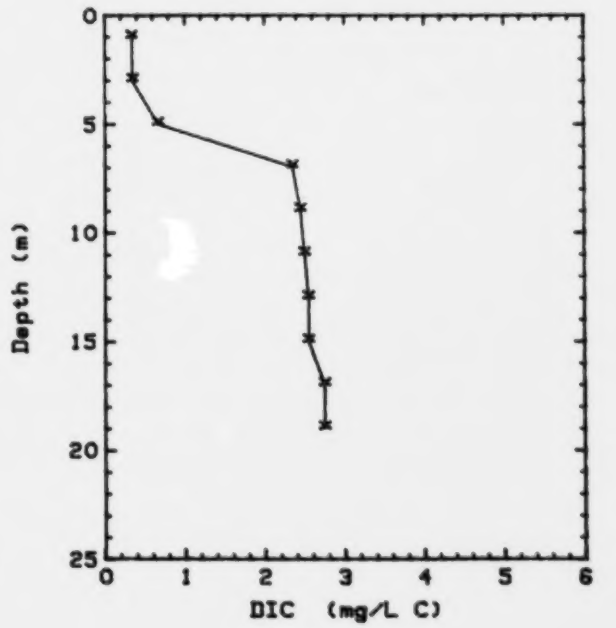
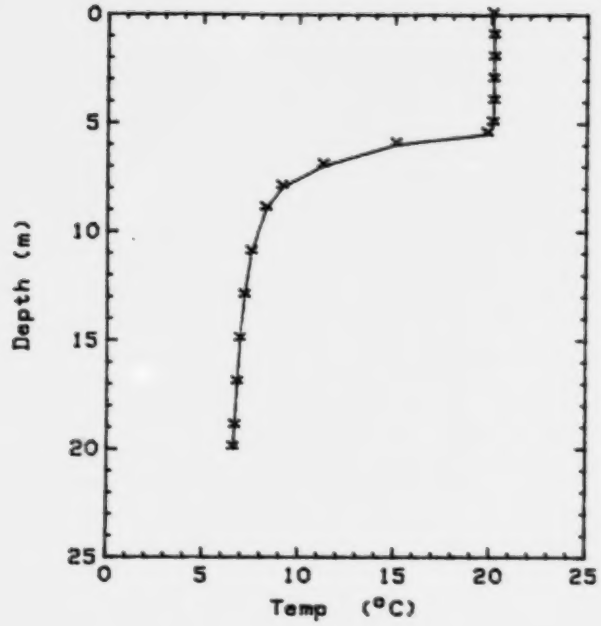
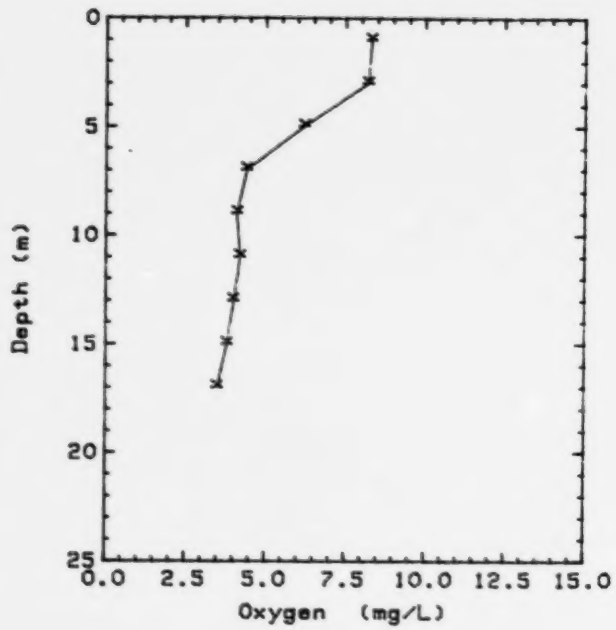
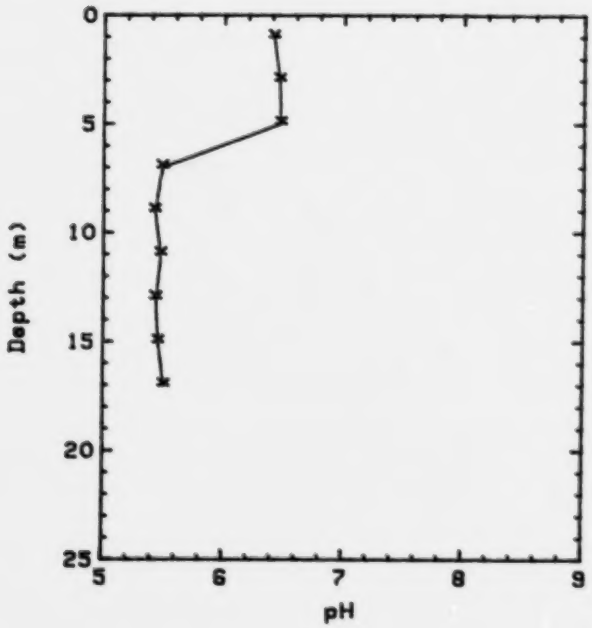



Table 51 con't

# TIMBERWOLF LAKE 82.08.05



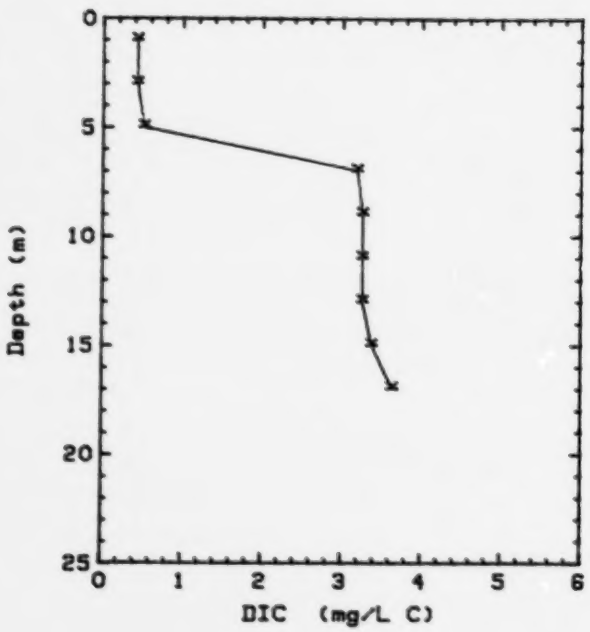
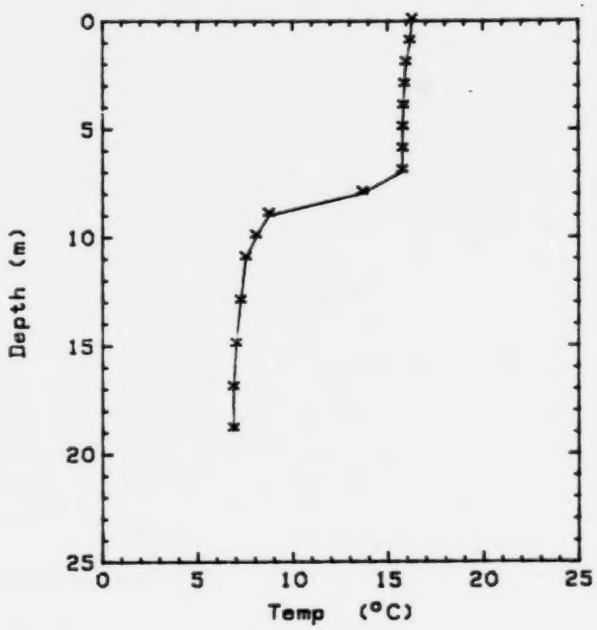
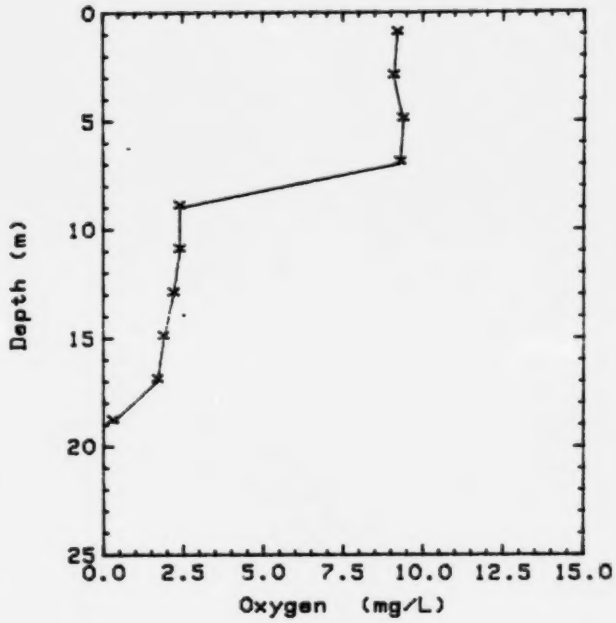
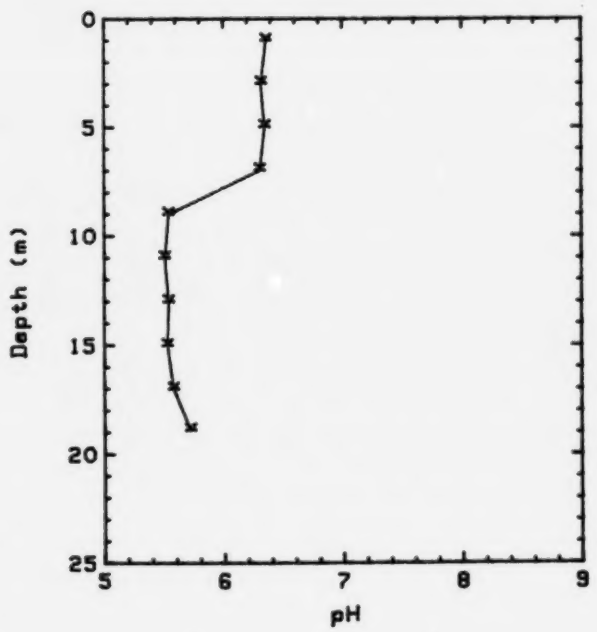



Table 51 con't

# TIMBERWOLF LAKE 82.09.08



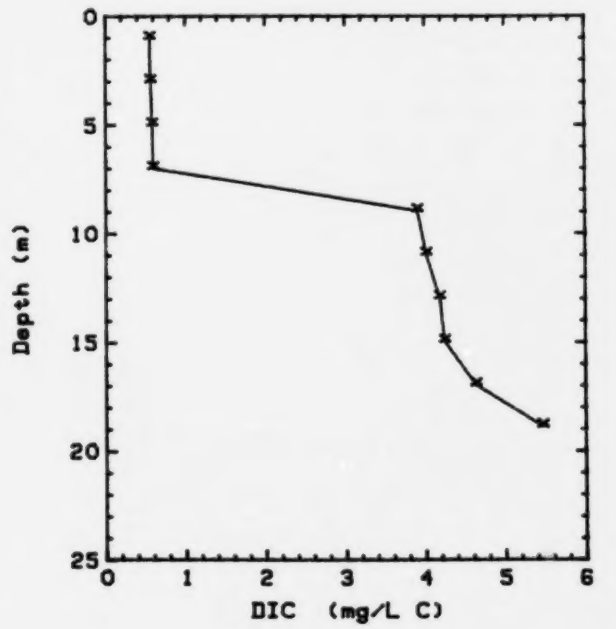
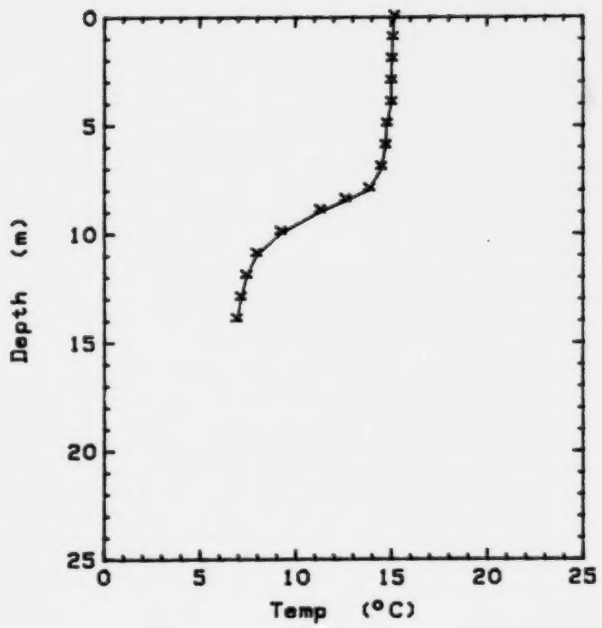
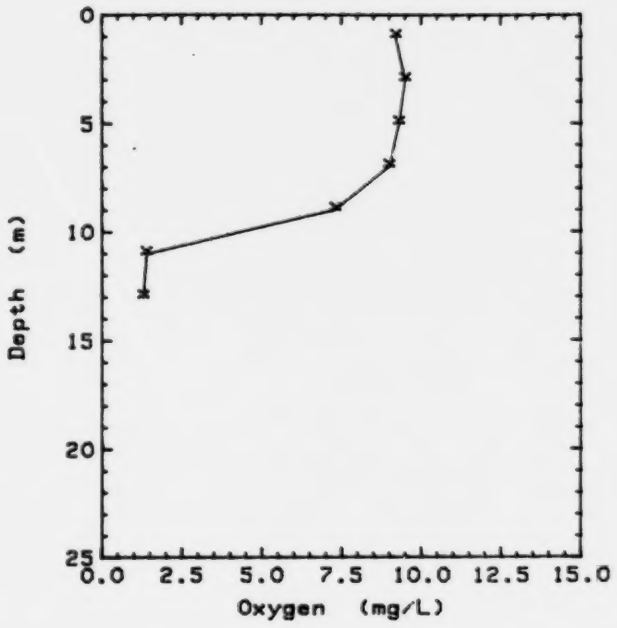
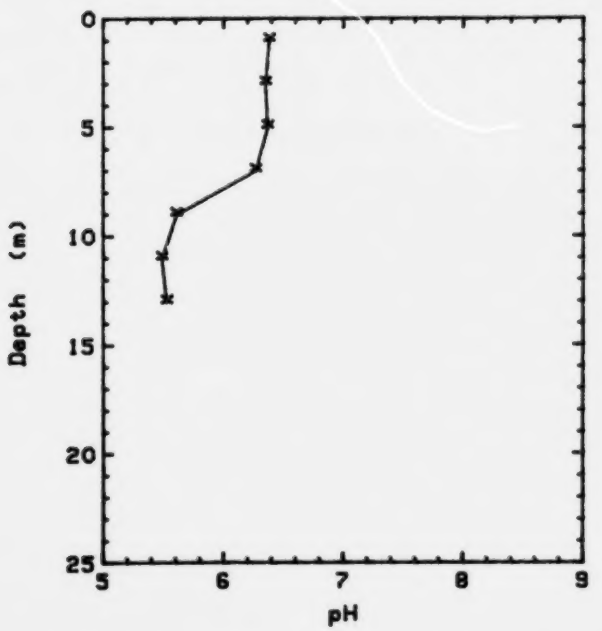



Table 51 con't

# TIMBERWOLF LAKE 82.09.30



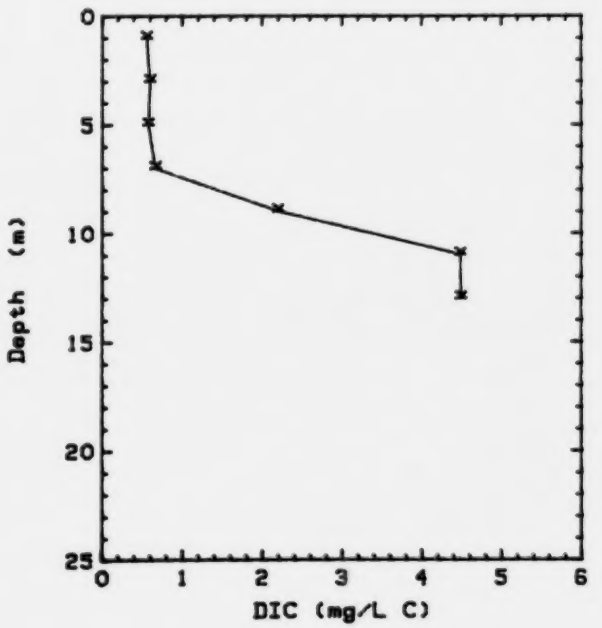
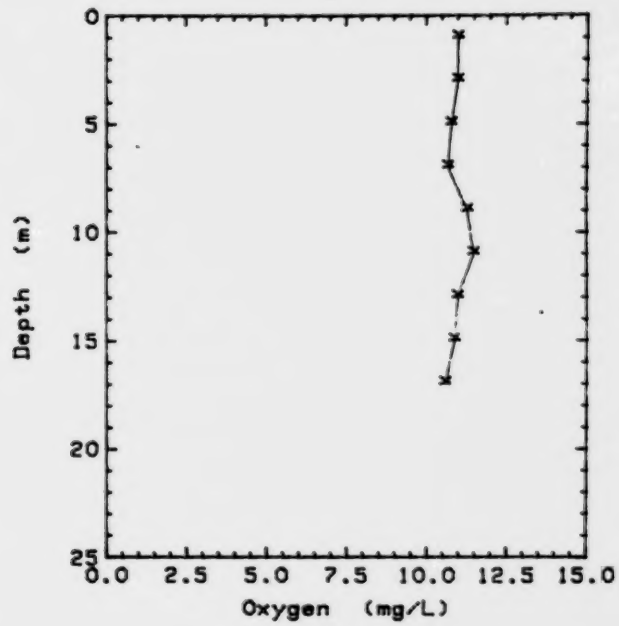
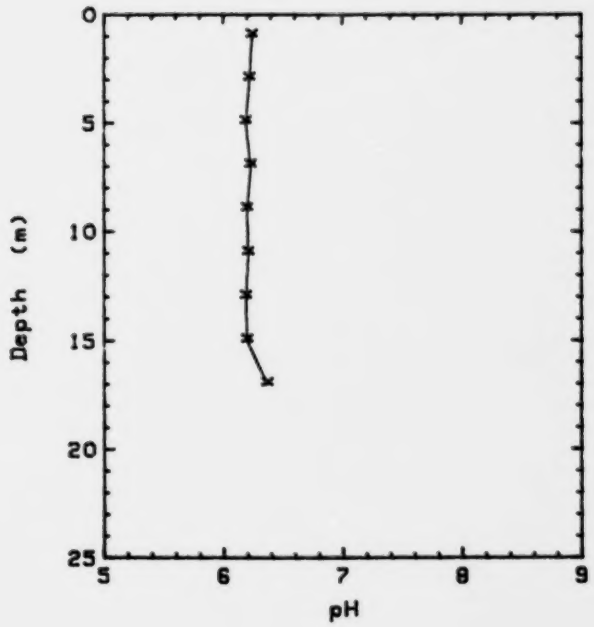



Table 51 con't

# TIMBERWOLF LAKE 82.11.15



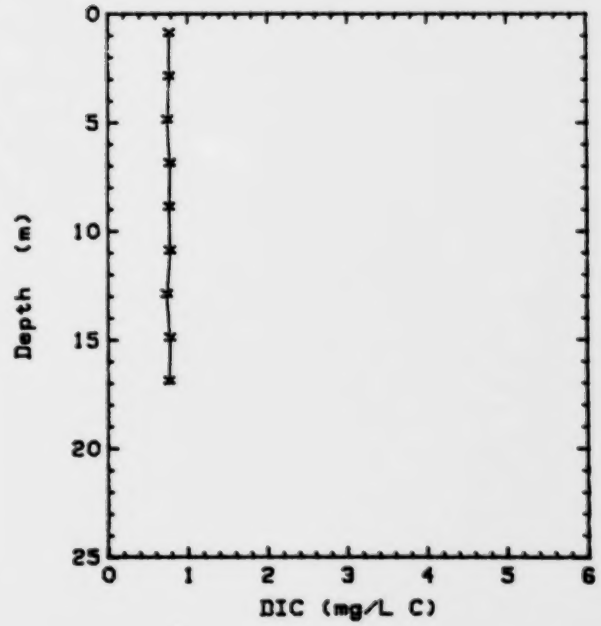
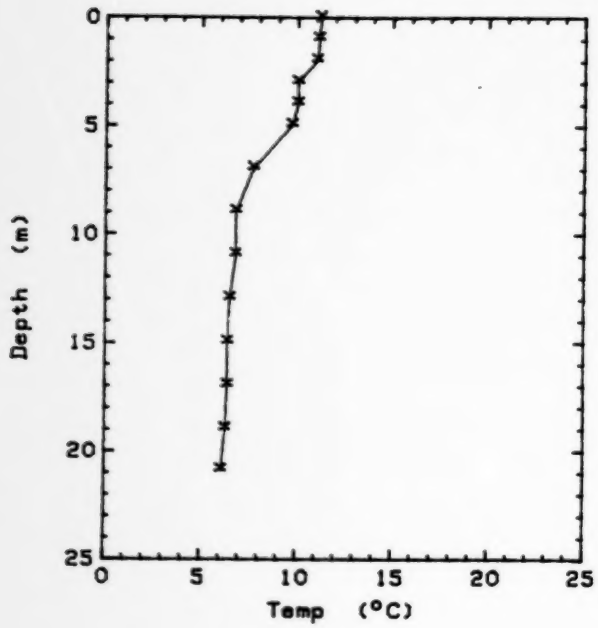
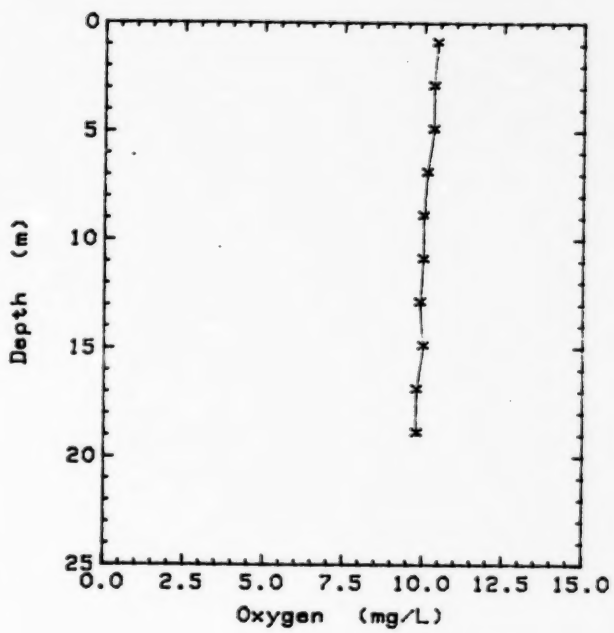
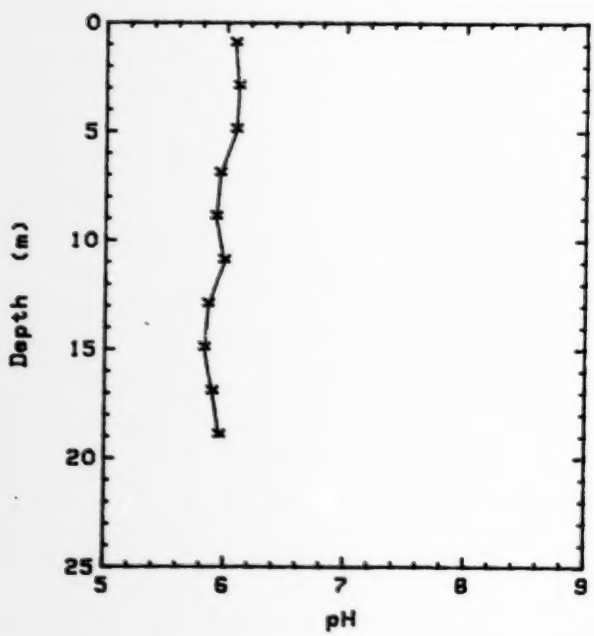



Table 51 con't

# TIMBERWOLF LAKE 83.05.16



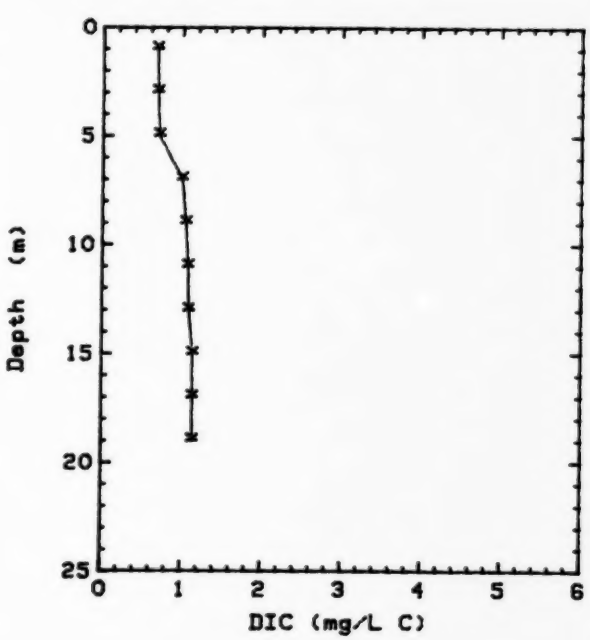
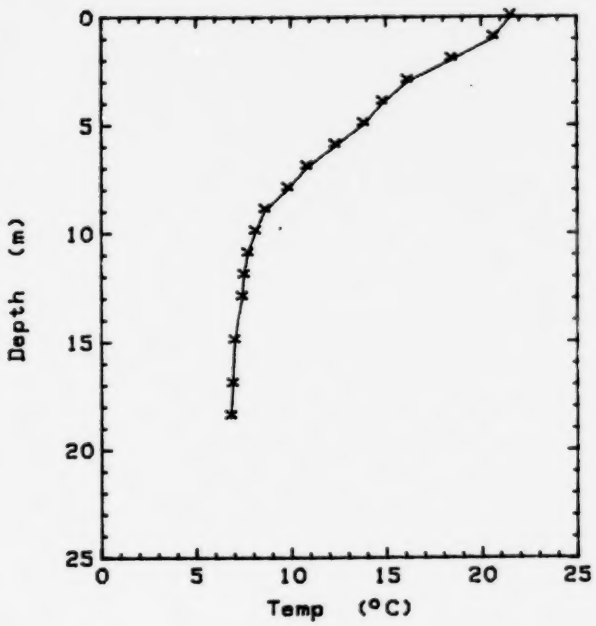
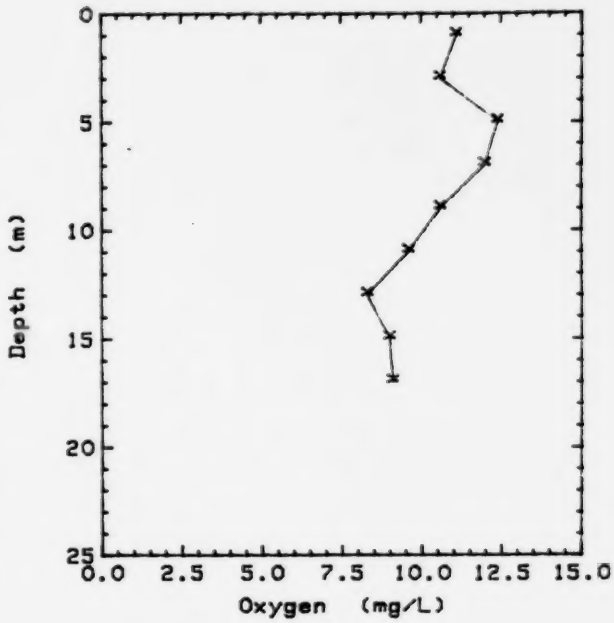
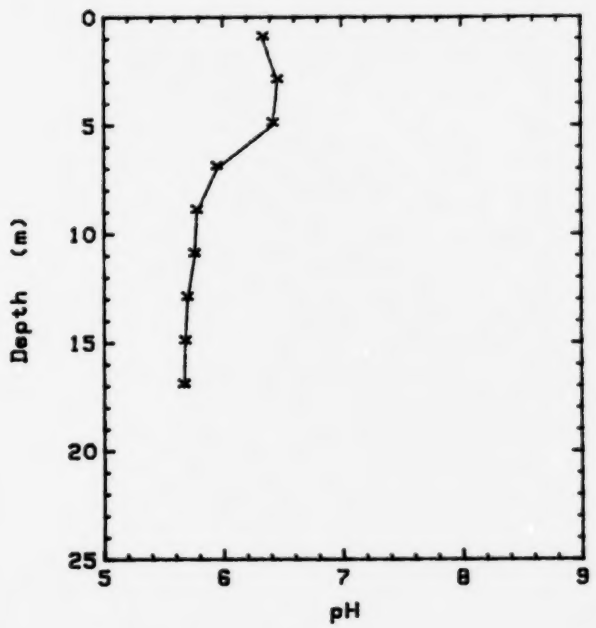



Table 51 con't

# TIMBERWOLF LAKE 83.06.15



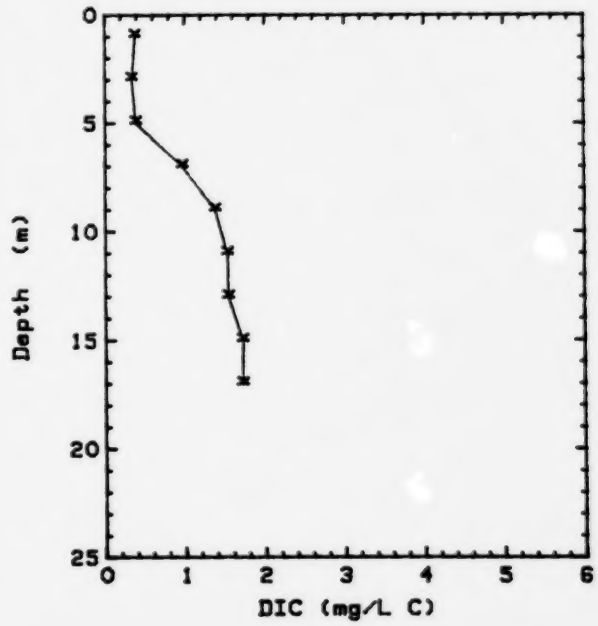
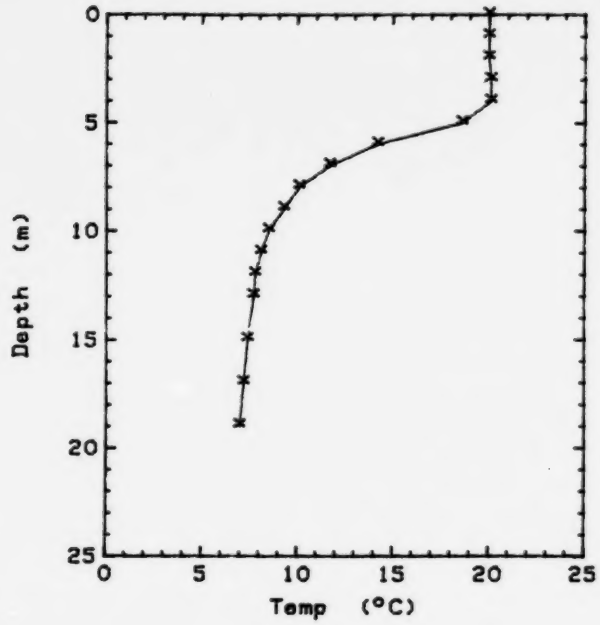
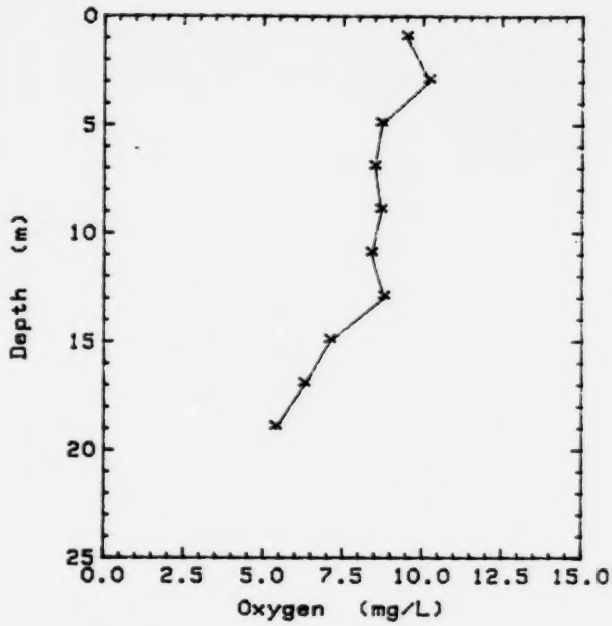
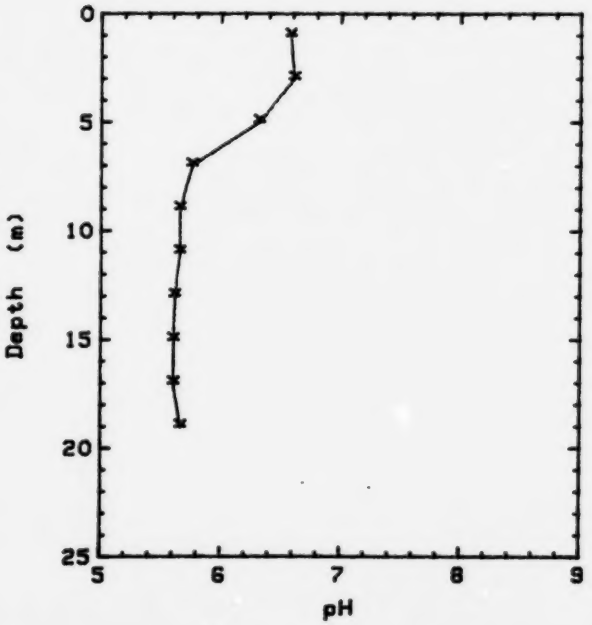



Table 51 con't

# TIMBERWOLF LAKE 83.07.11



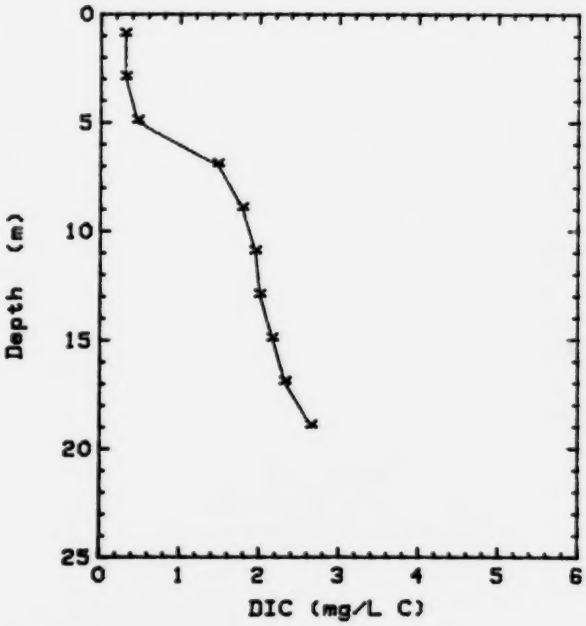
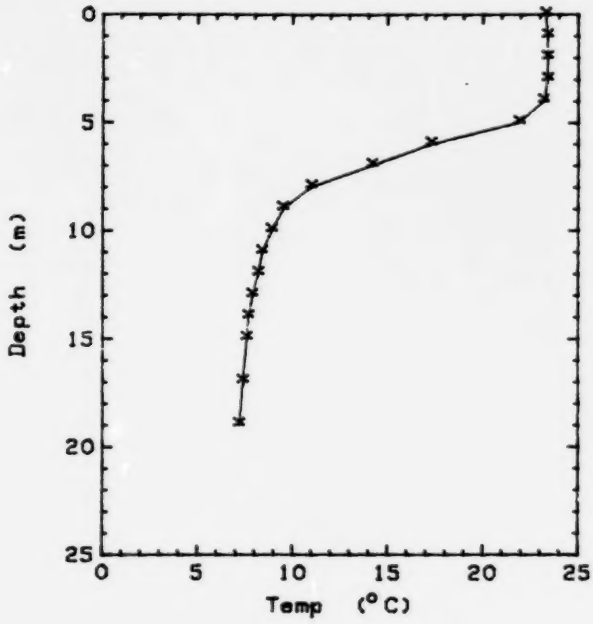
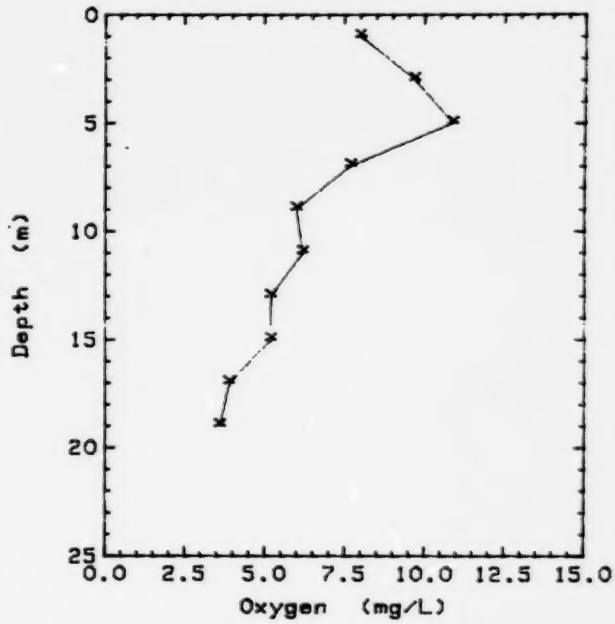
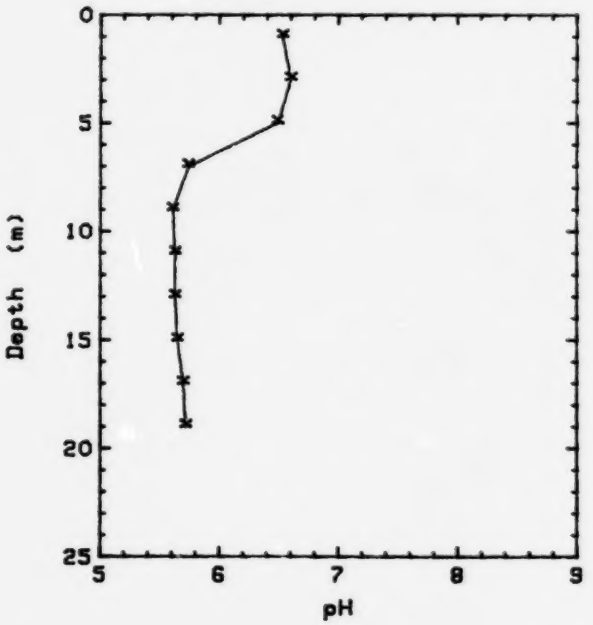



Table 51 con't

# TIMBERWOLF LAKE 83.08.08



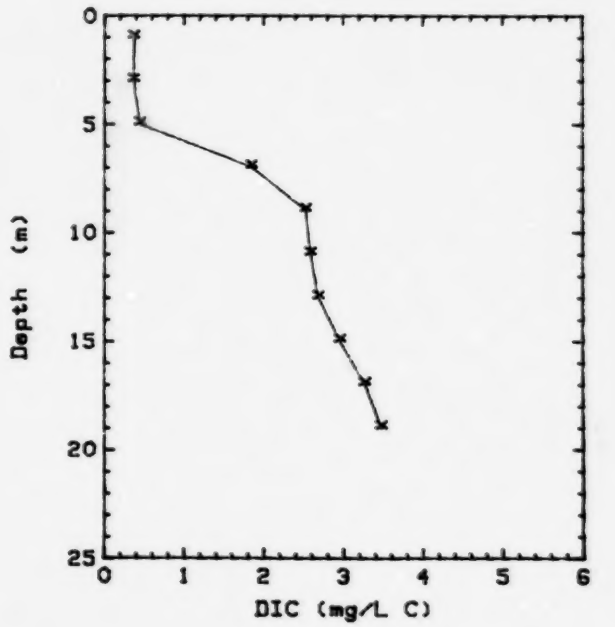
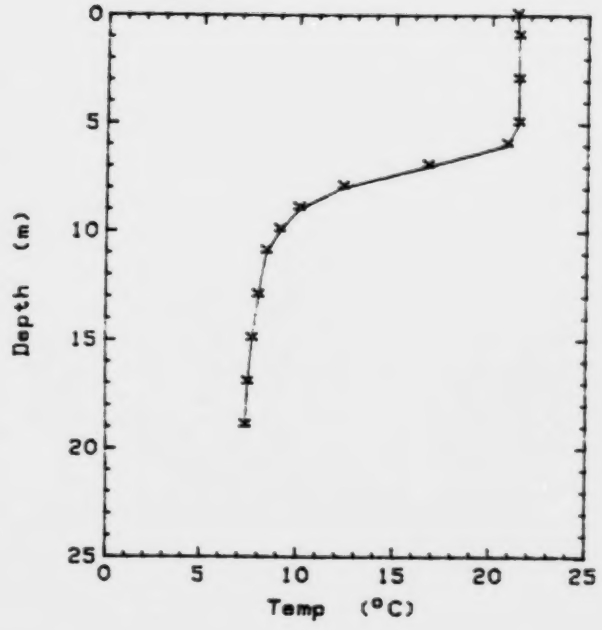
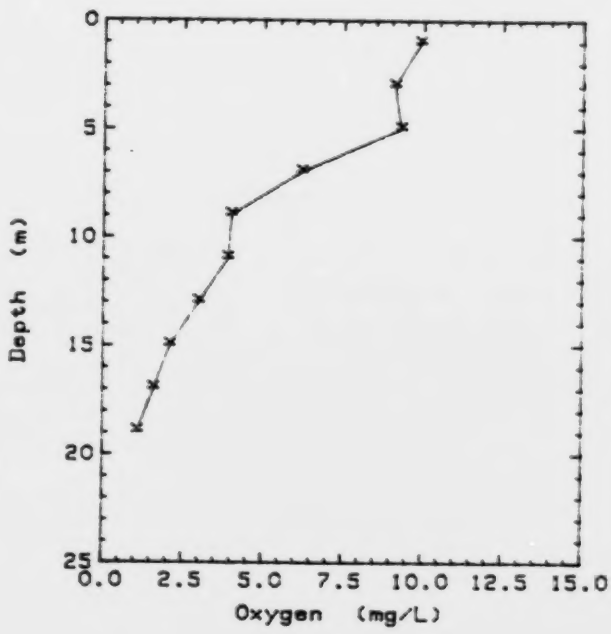
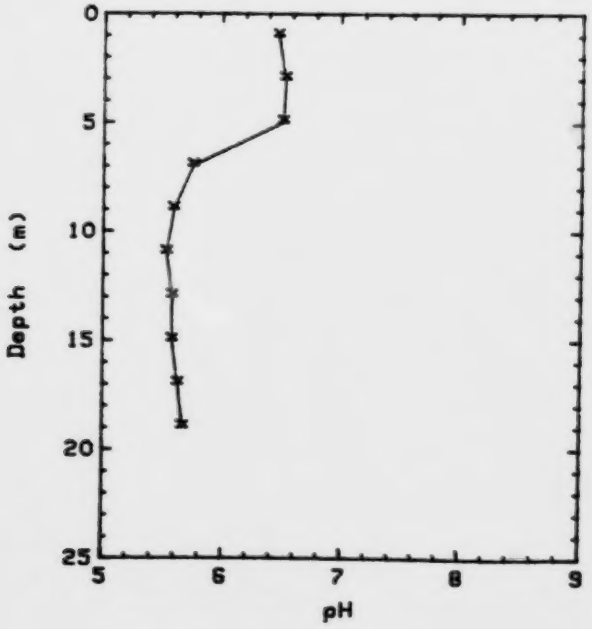



Table 51 con't

# TIMBERWOLF LAKE 83.09.07



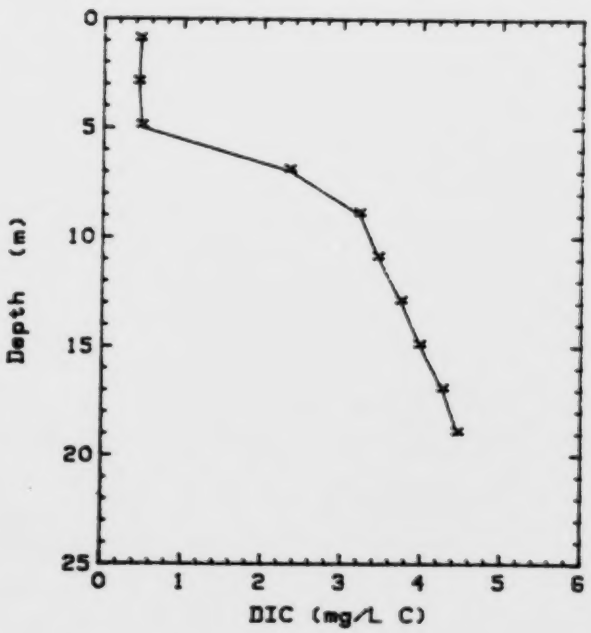
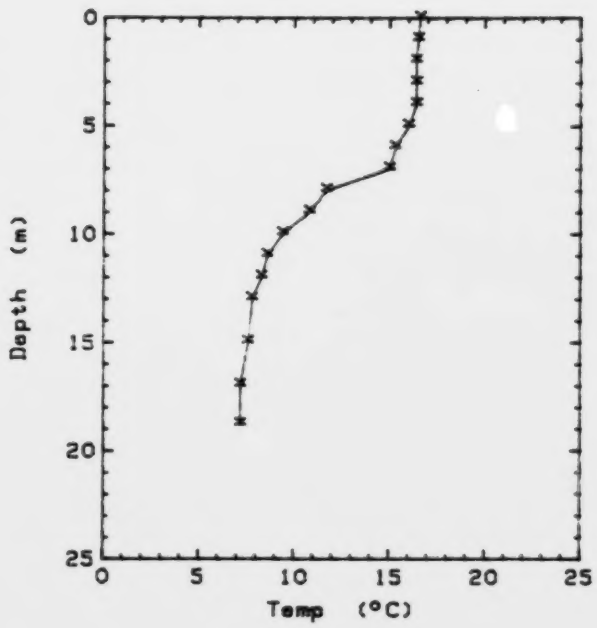
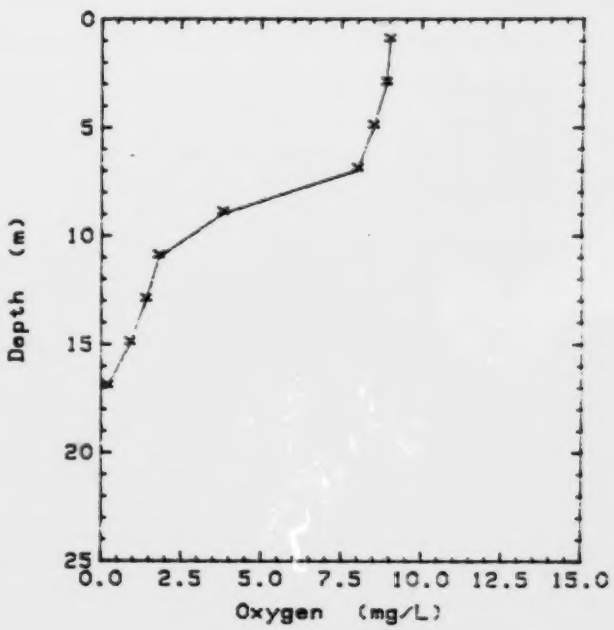
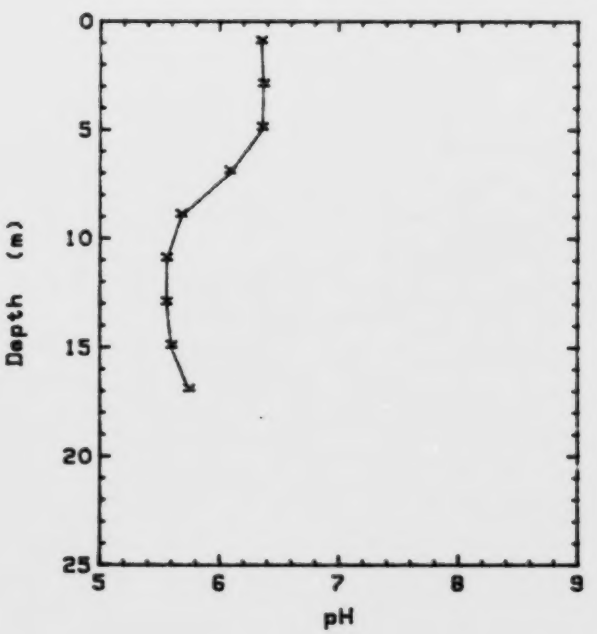



Table 51 con't

# TIMBERWOLF LAKE 83.10.03



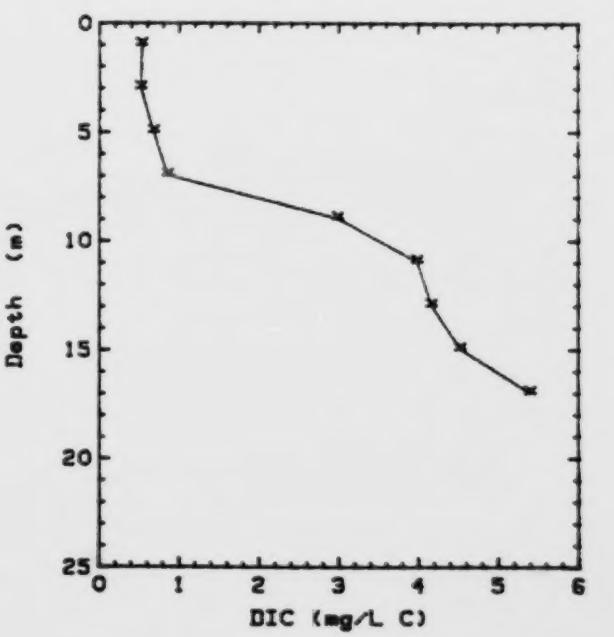
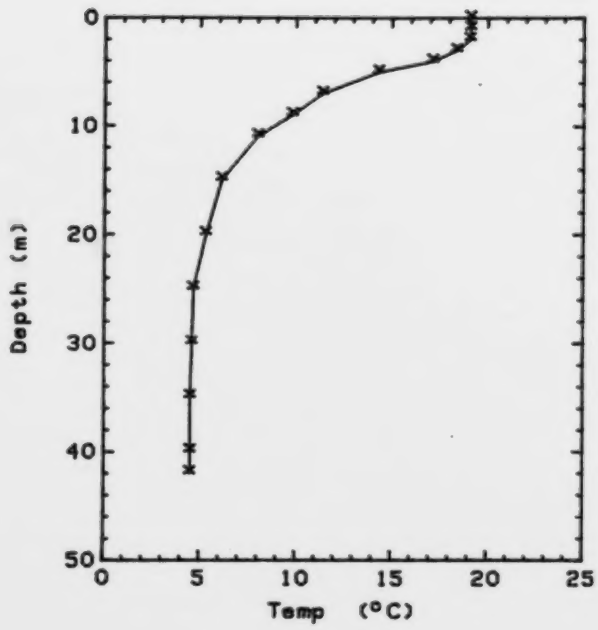
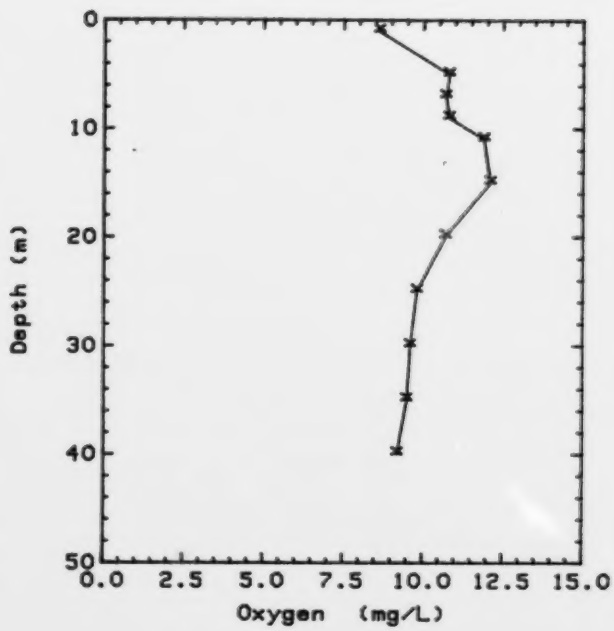
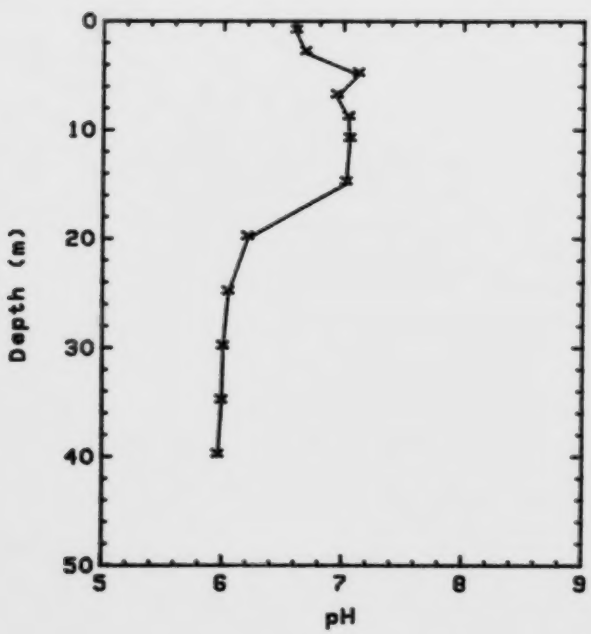



Table 52 Westward Lake

WESTWARD LAKE 81.06.17



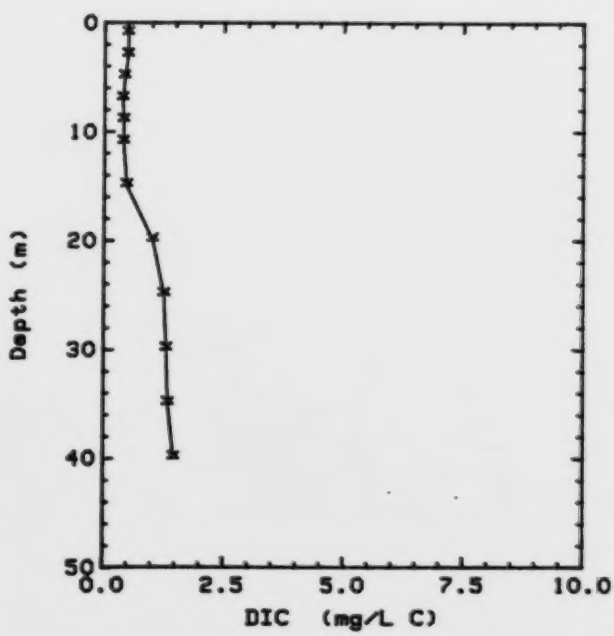
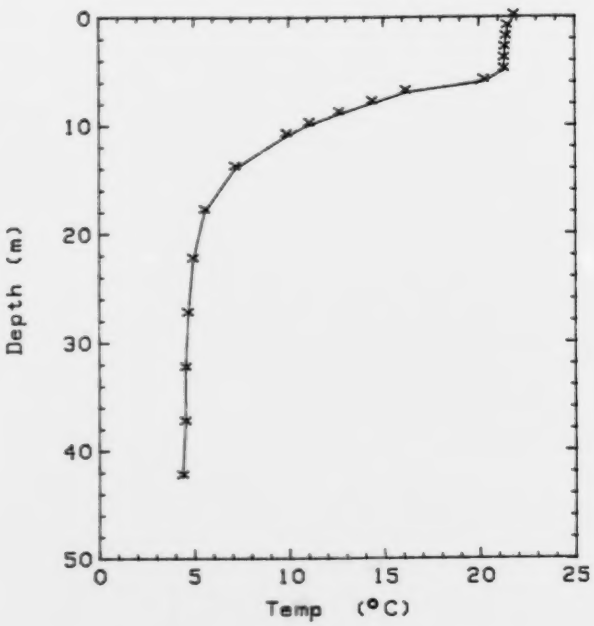
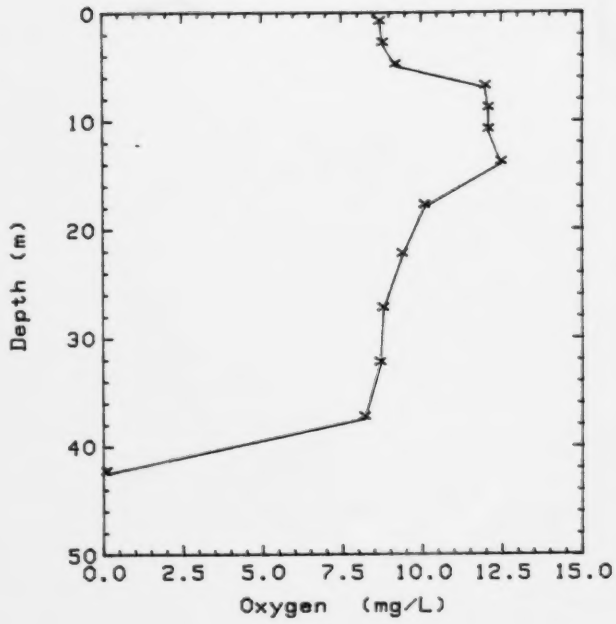
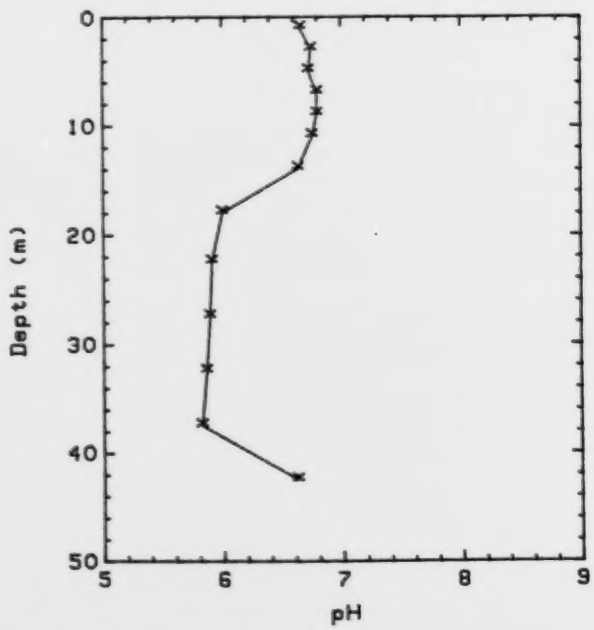



Table 52 con't

WESTWARD LAKE 81.08.06



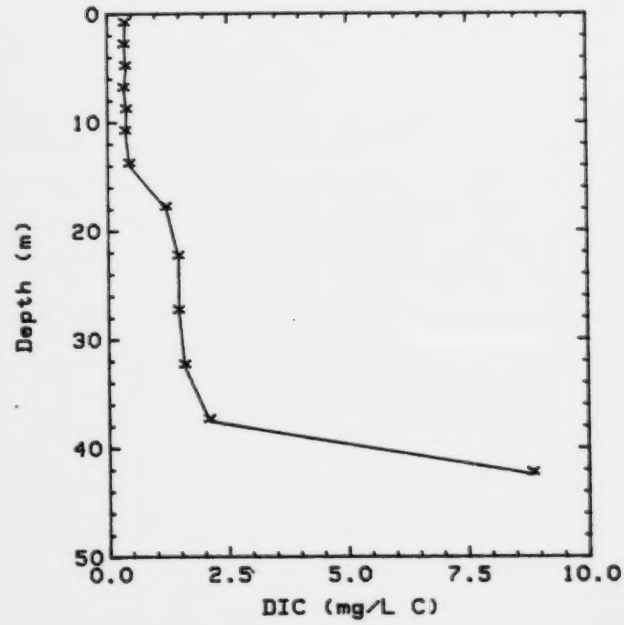
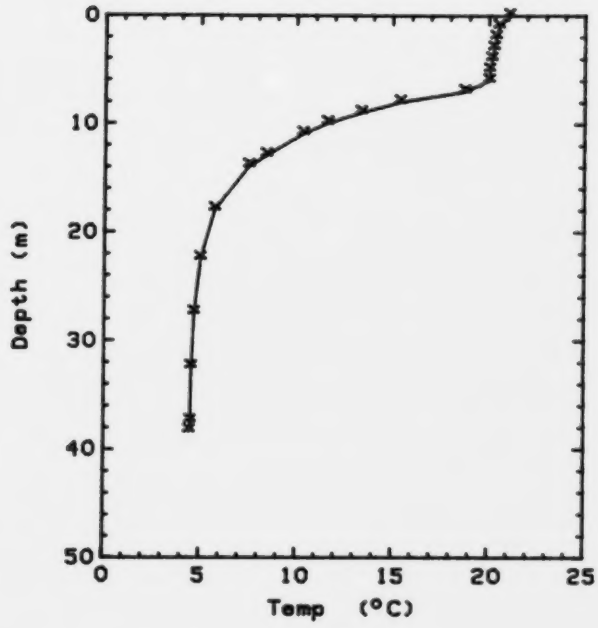
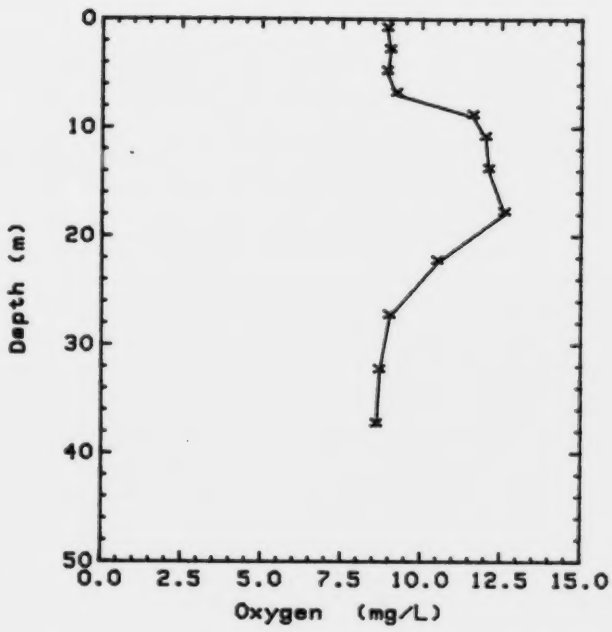



Table 52 con't

# WESTWARD LAKE 81.08.19



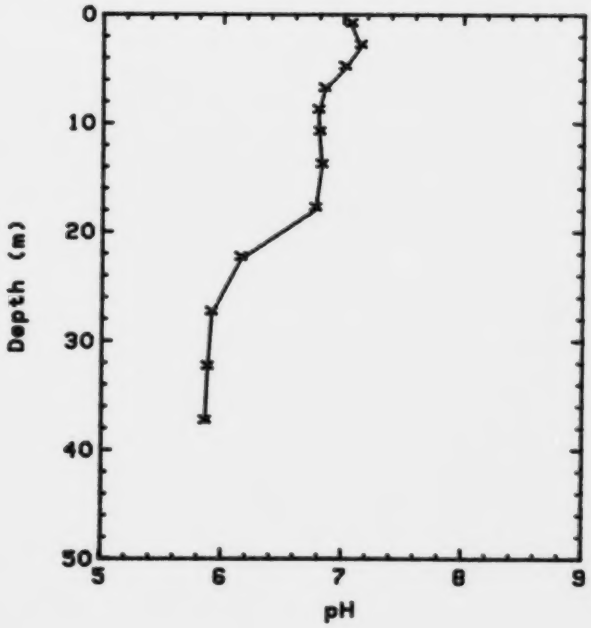
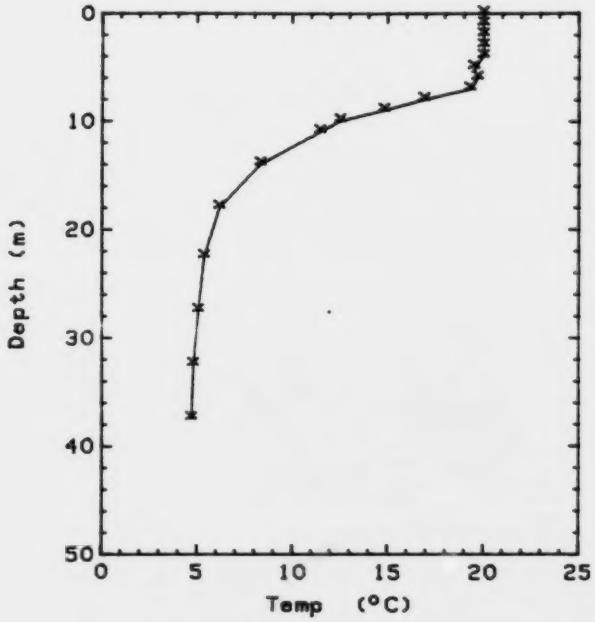
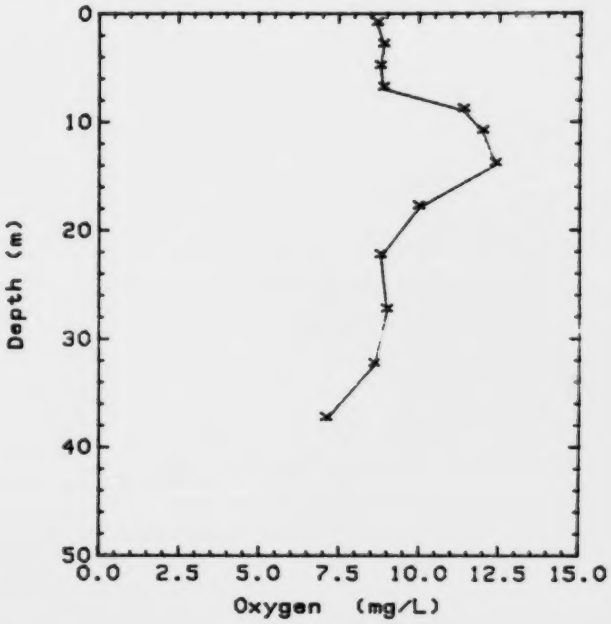
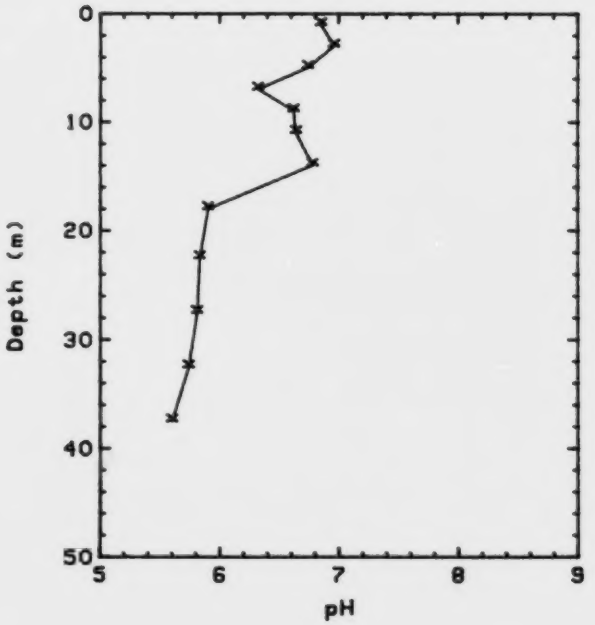



Table 52 con't

# WESTWARD LAKE 81.08.31



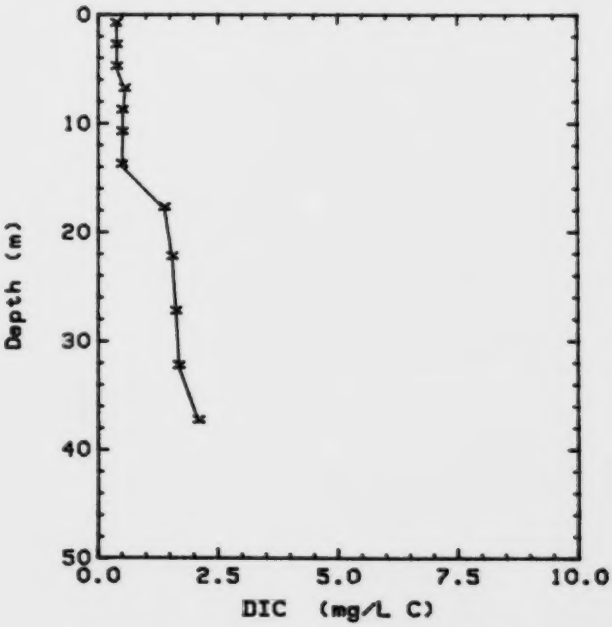
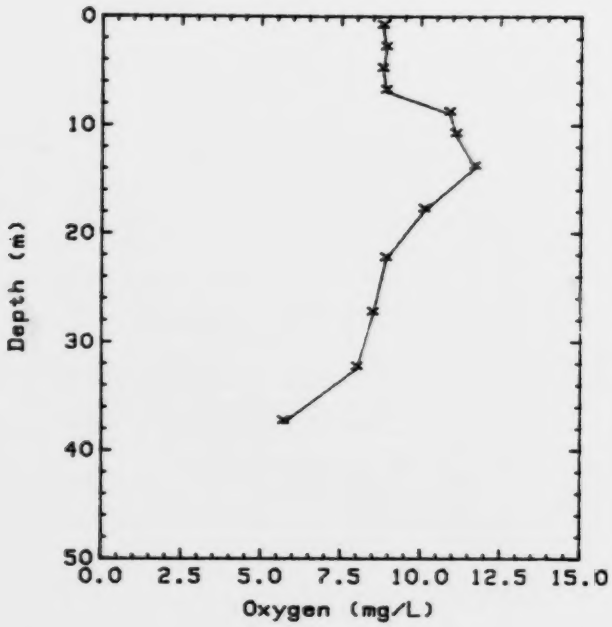
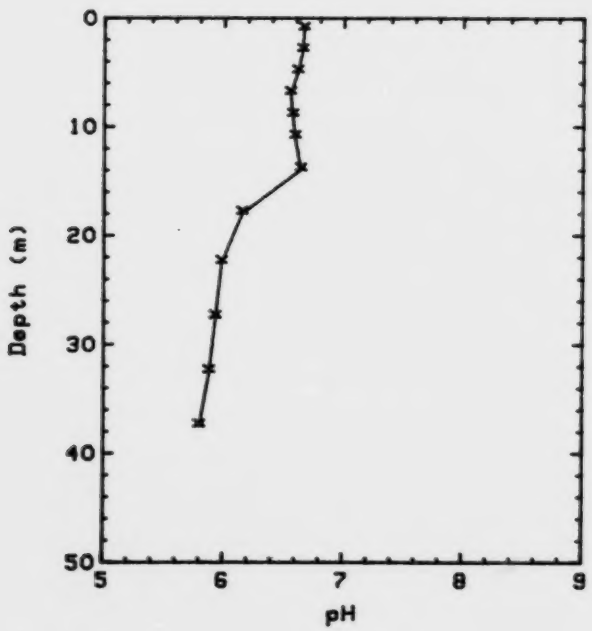



Table 52 con't

# WESTWARD LAKE 81.09.16



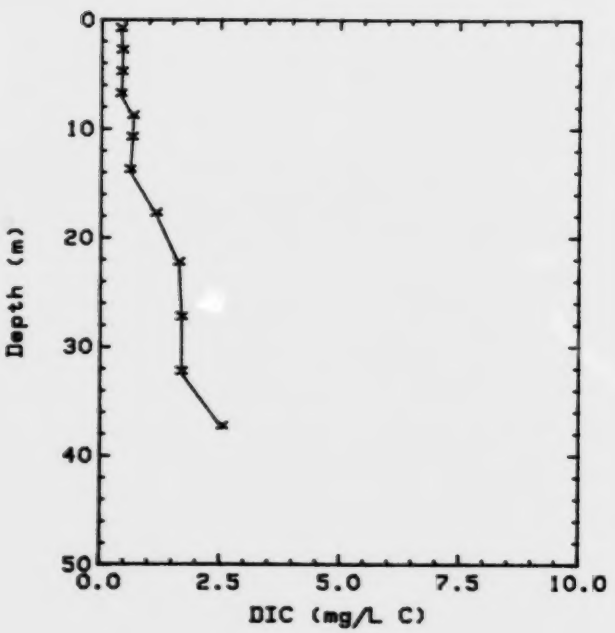
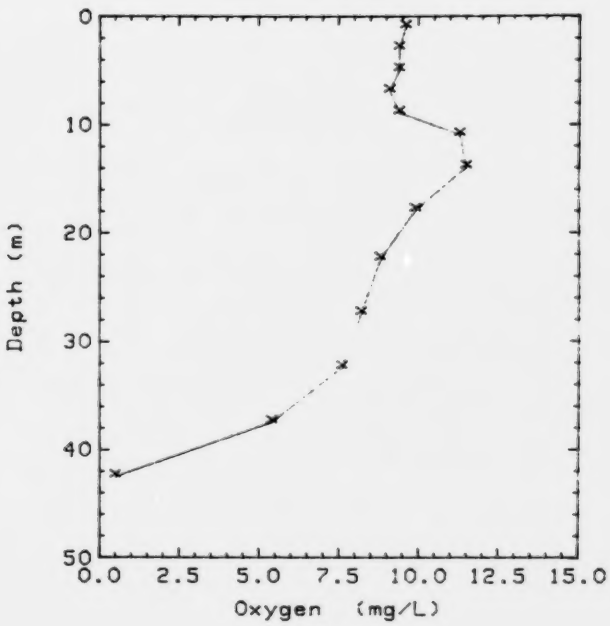
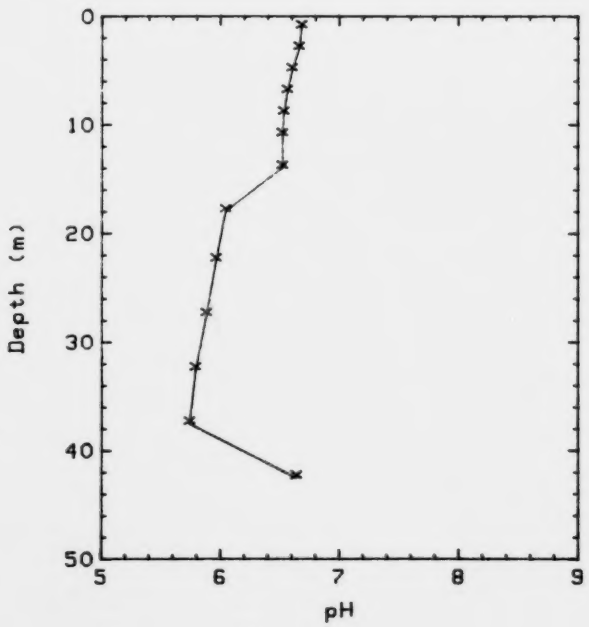



Table 52 con't

WESTWARD LAKE 81.09.28



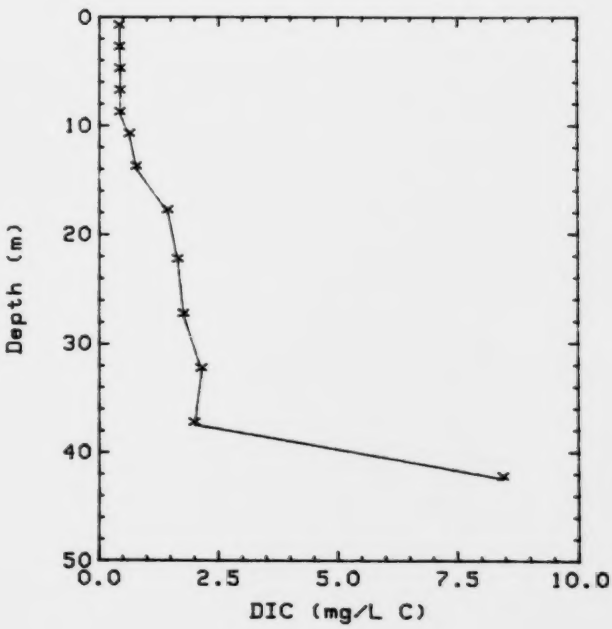
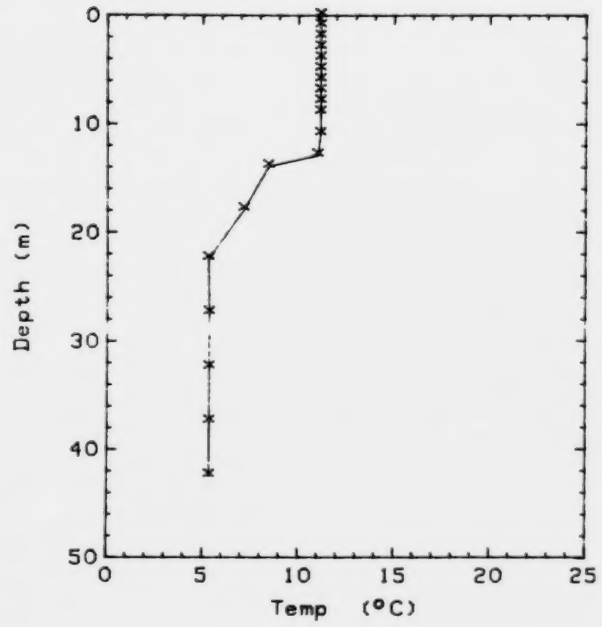
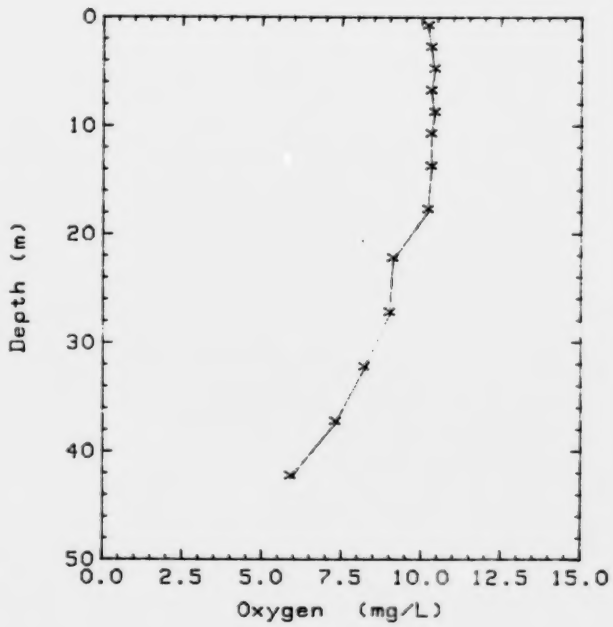
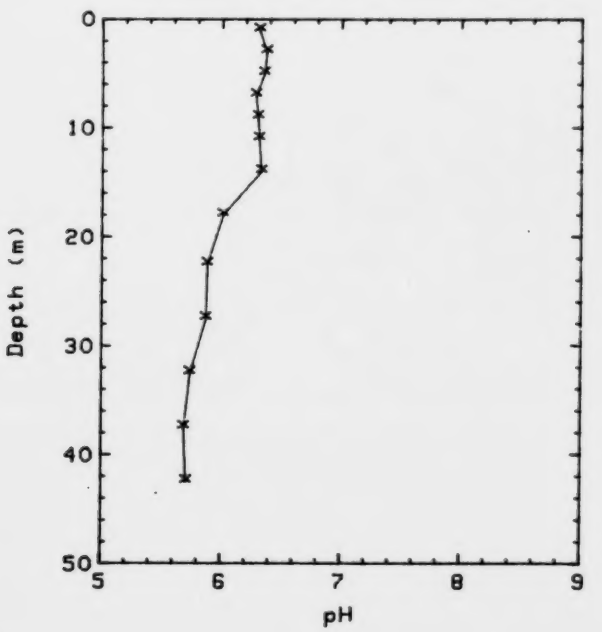



Table 52 con't

# WESTWARD LAKE 81.10.16



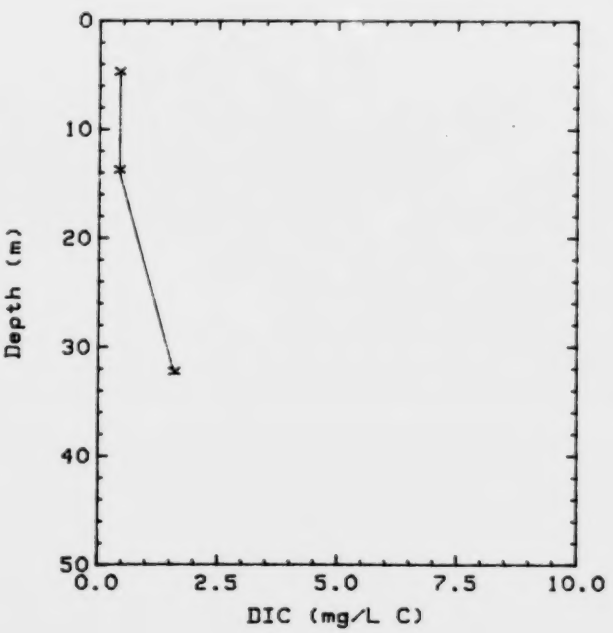
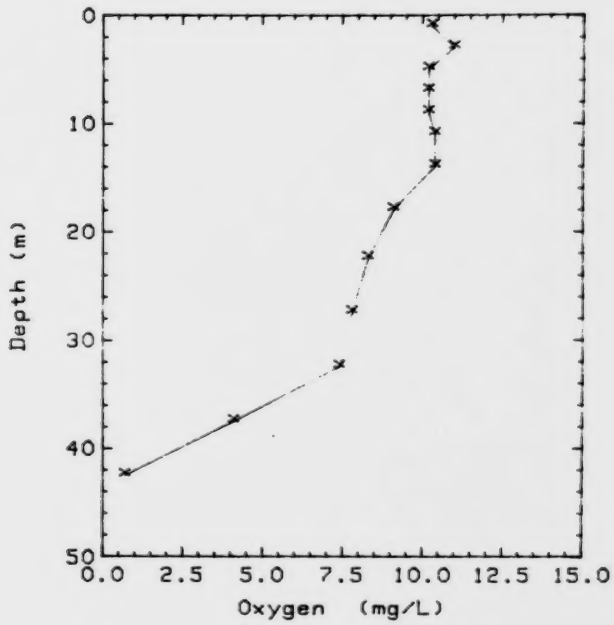
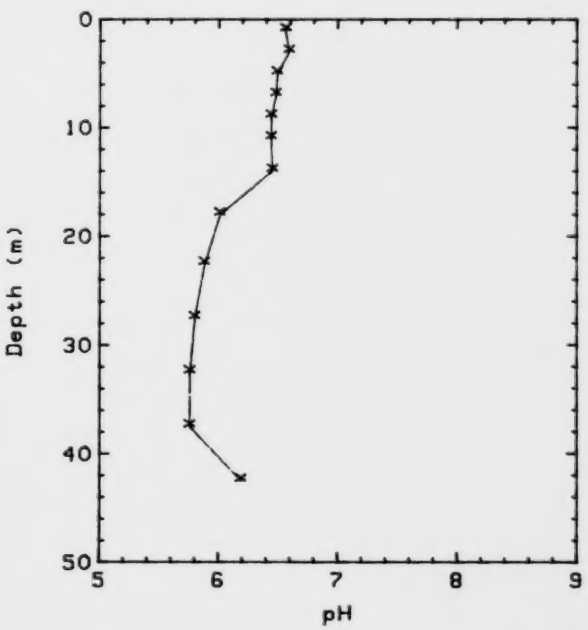



Table 52 con't

# WESTWARD LAKE 81.10.29



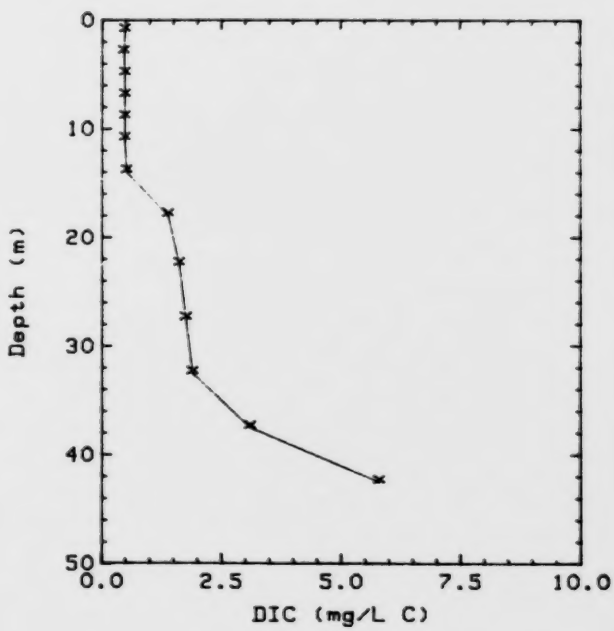
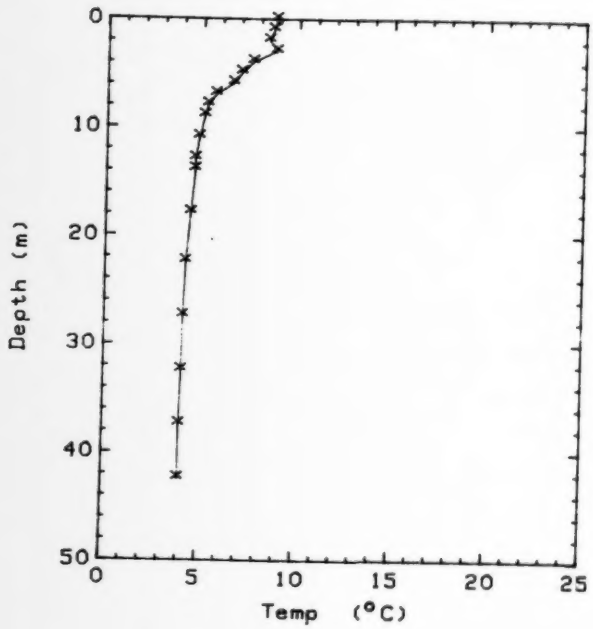
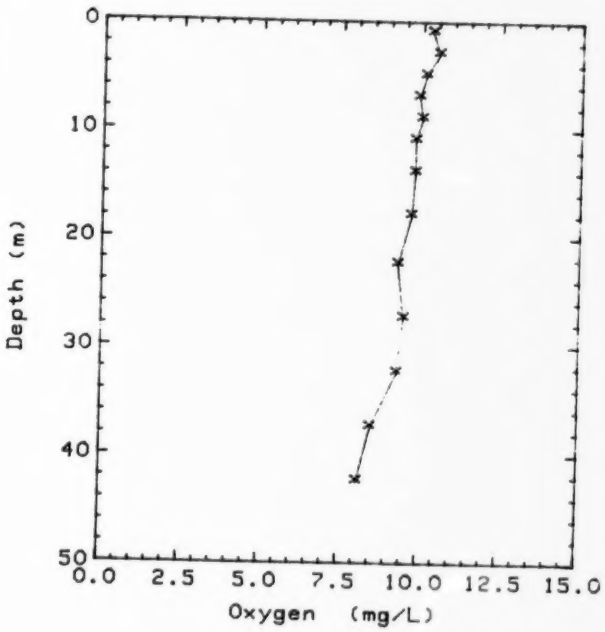
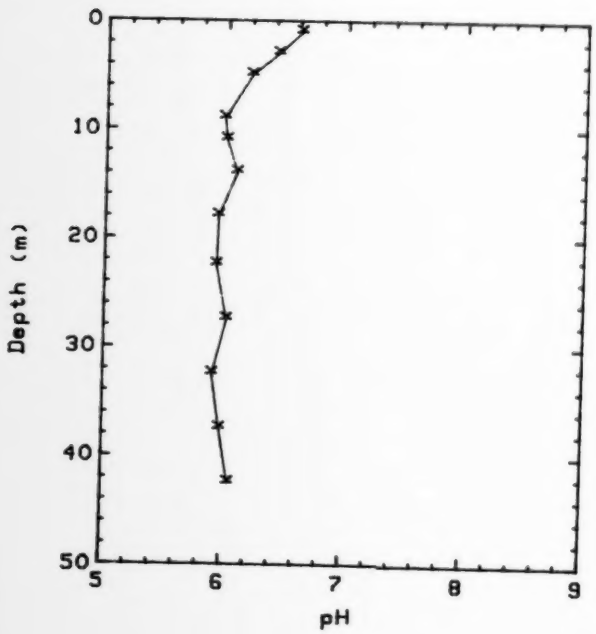



Table 52 con't

# WESTWARD LAKE 82.05.10



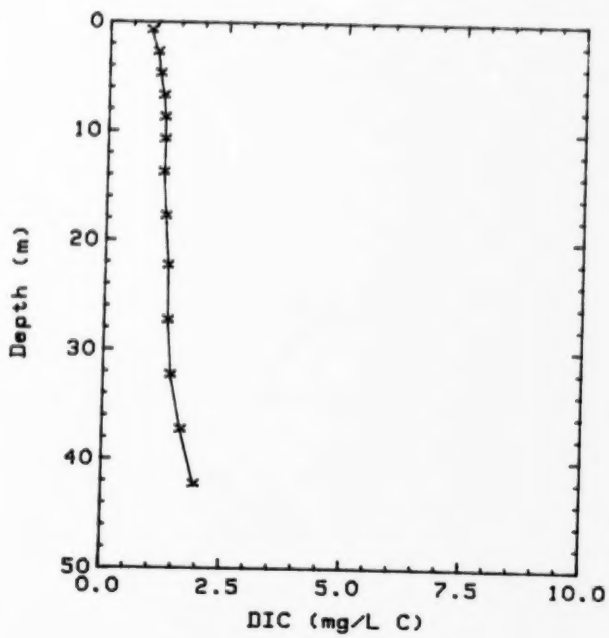
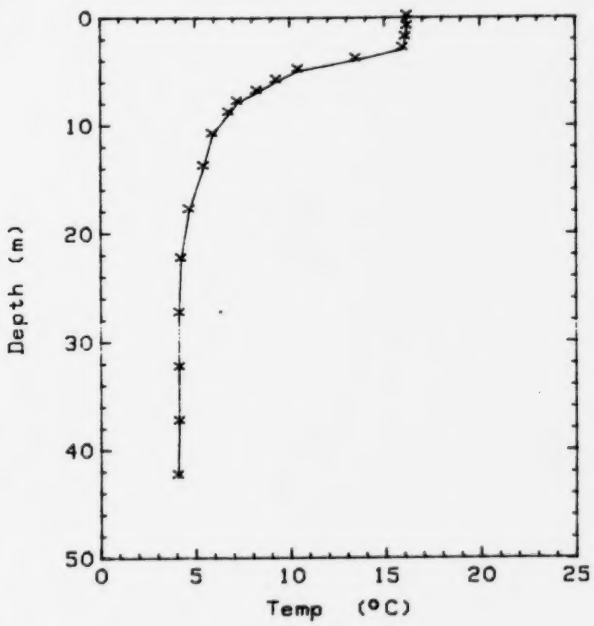
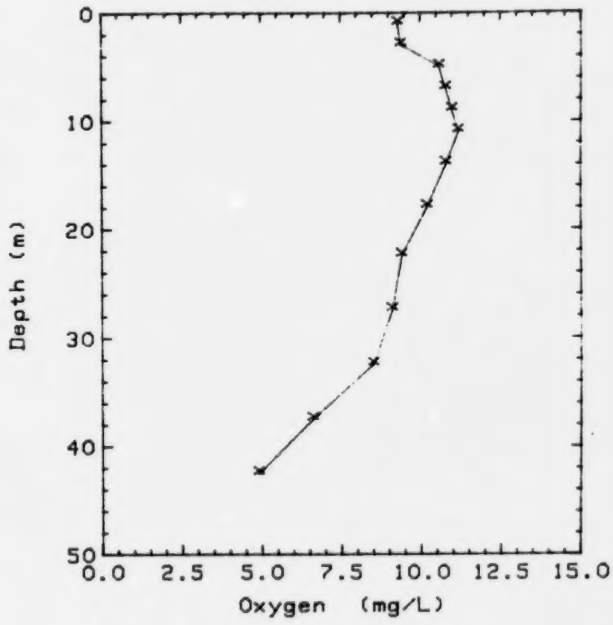
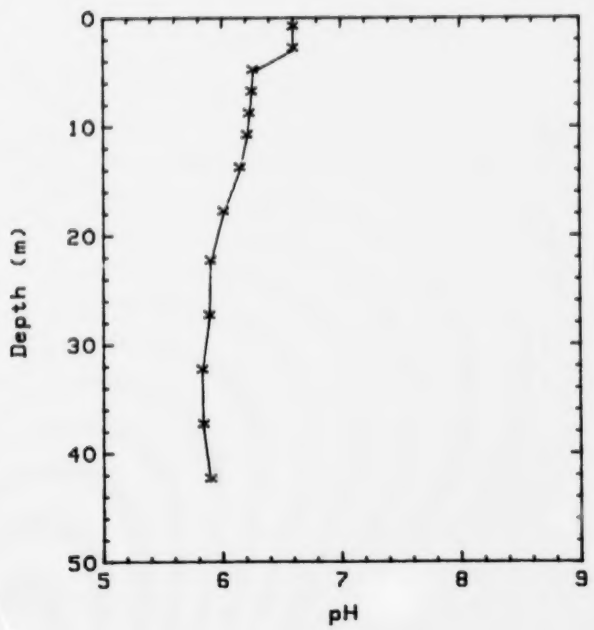



Table 52 con't

# WESTWARD LAKE 82.06.07



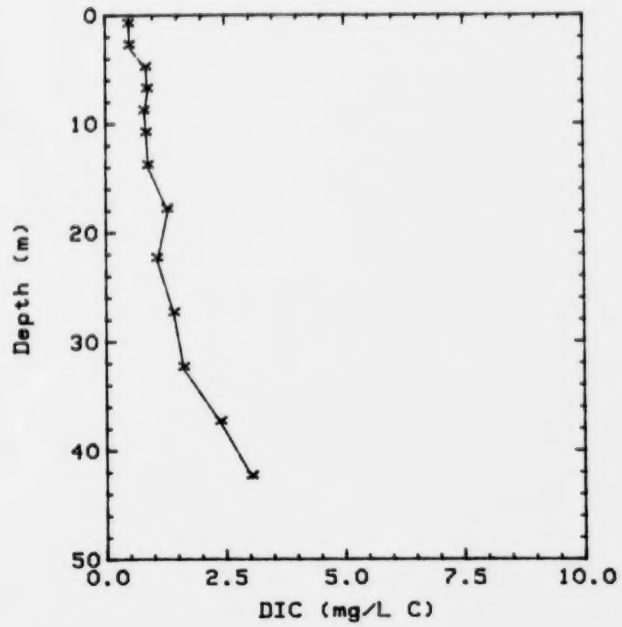
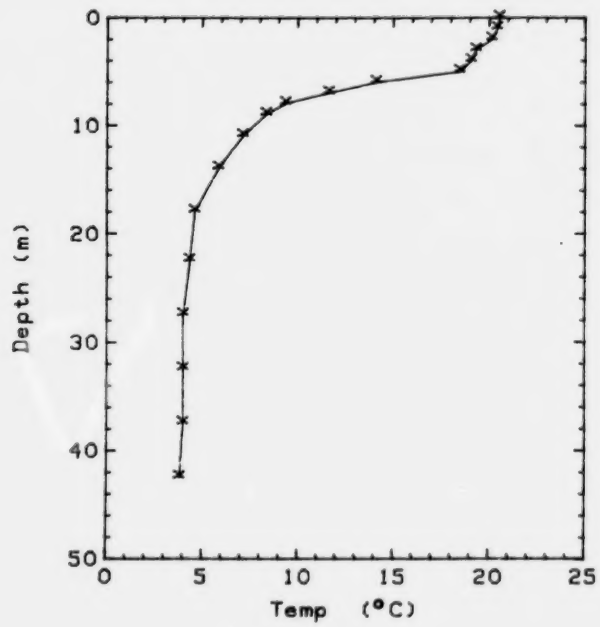
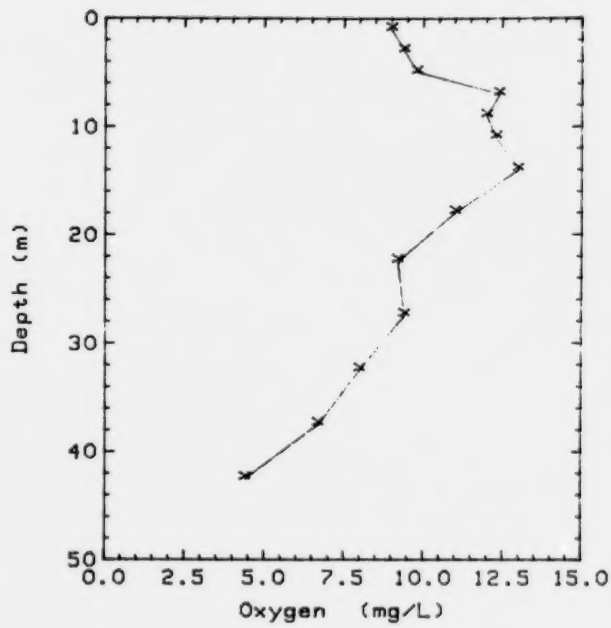
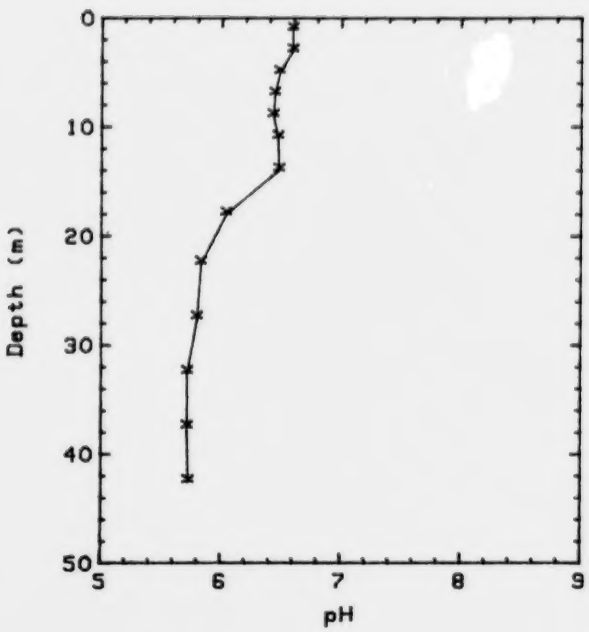



Table 52 con't

WESTWARD LAKE 82.07.07



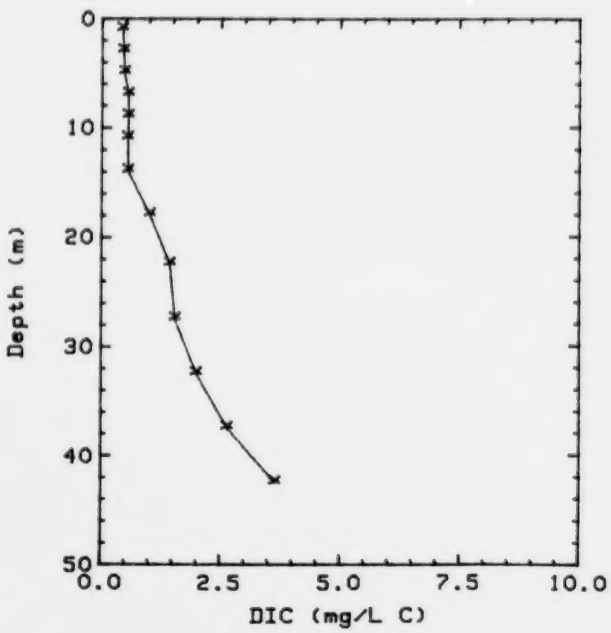
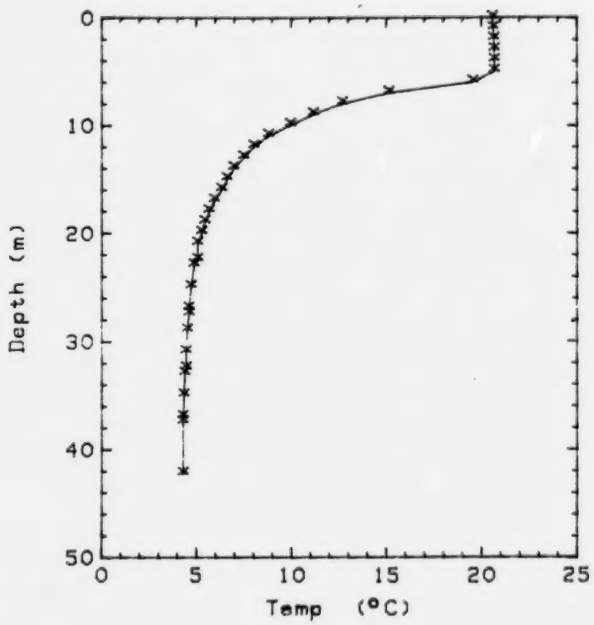
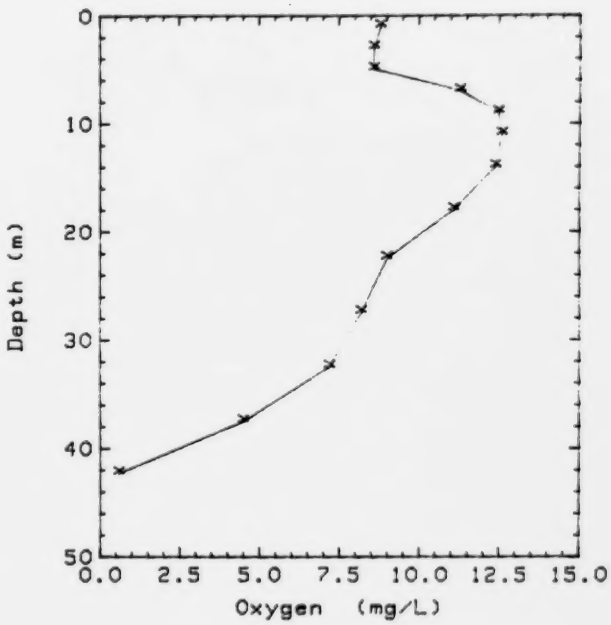
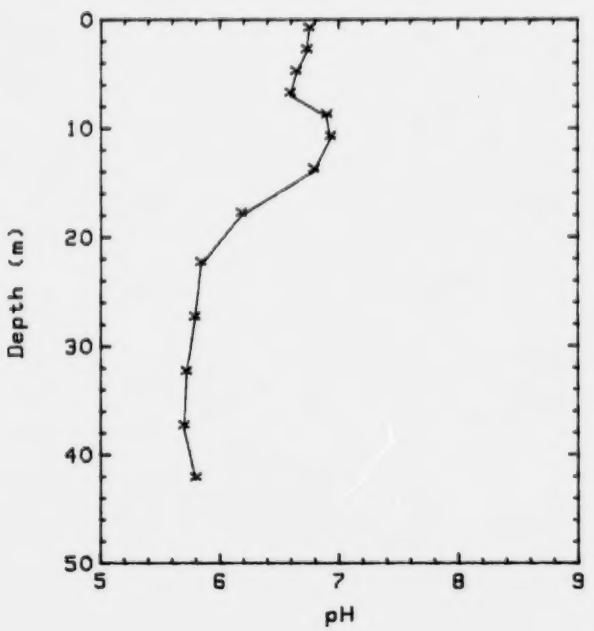



Table 52 con't

WESTWARD LAKE 82.08.03



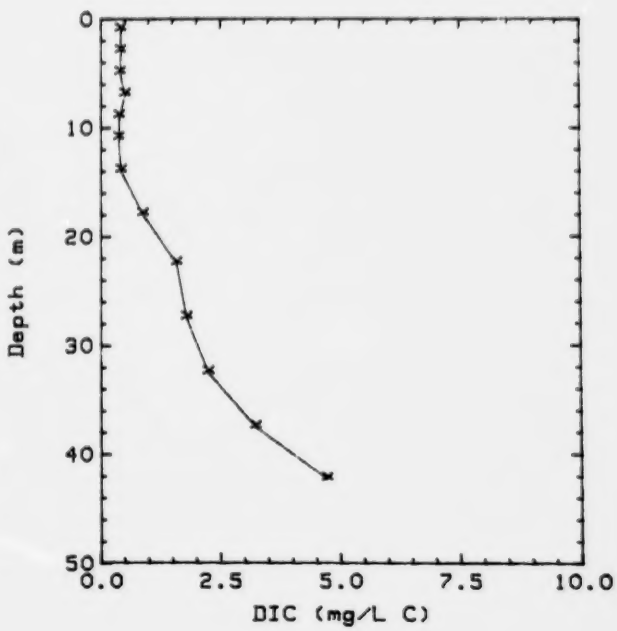
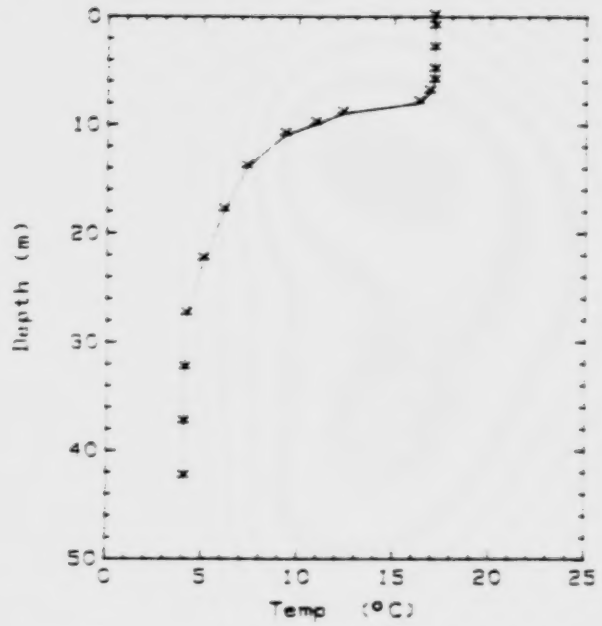
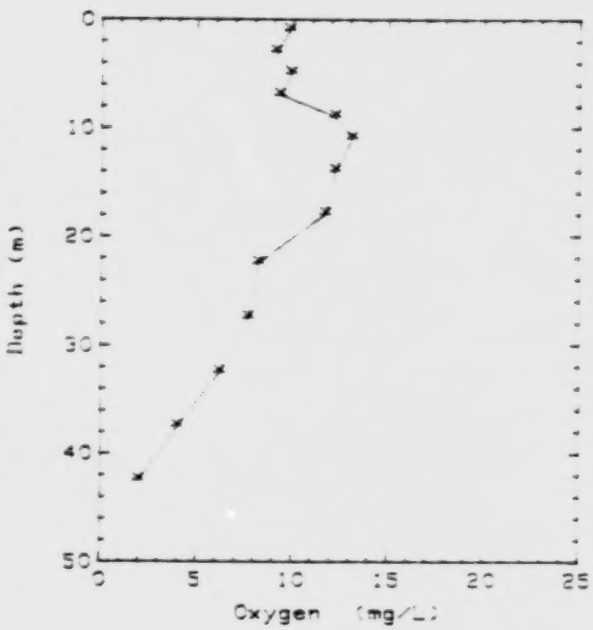
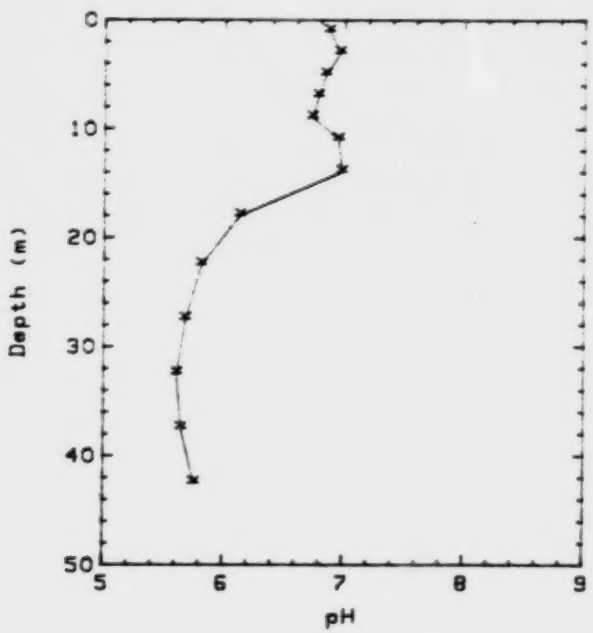



Table 52 con't

WESTWARD LAKE 82.29.21



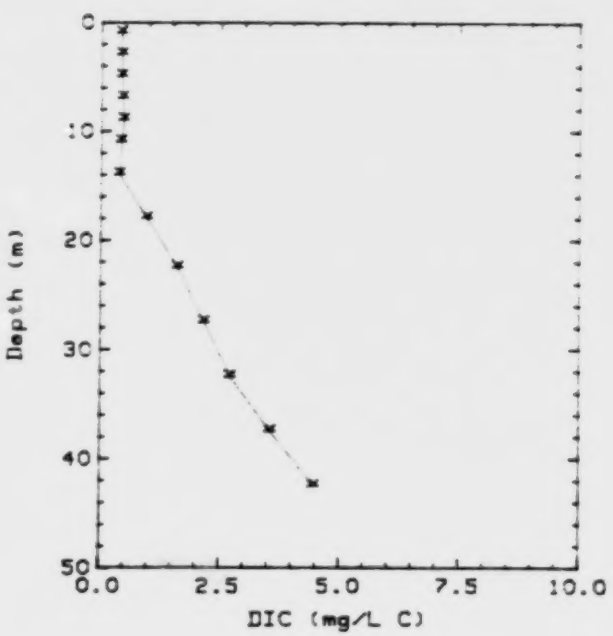
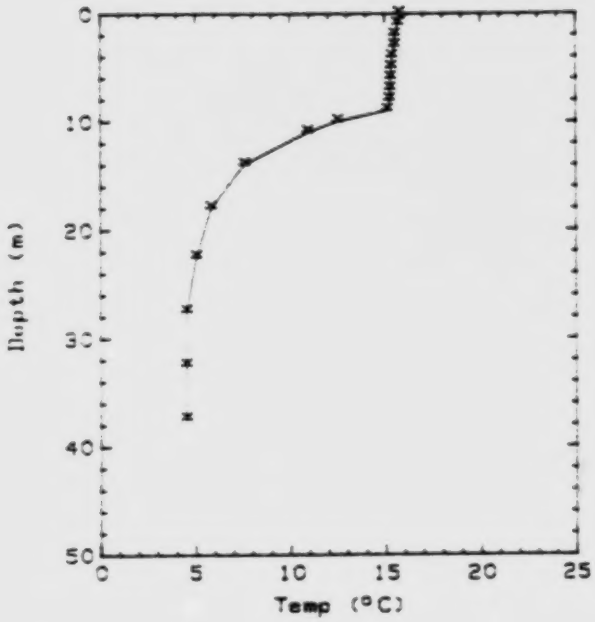
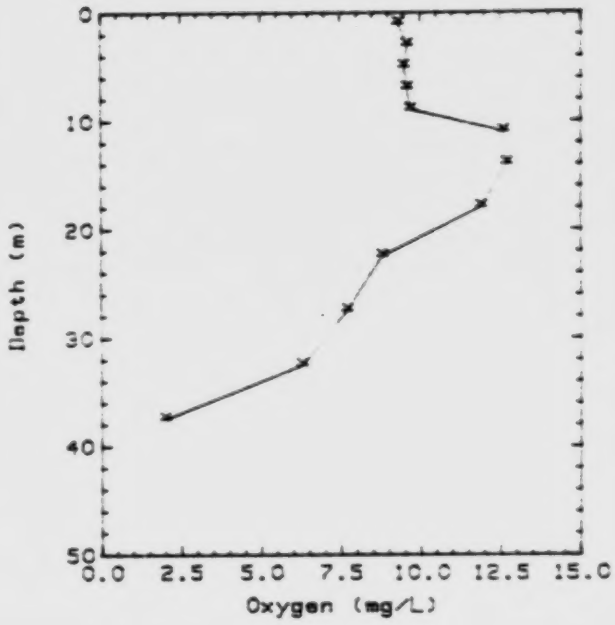
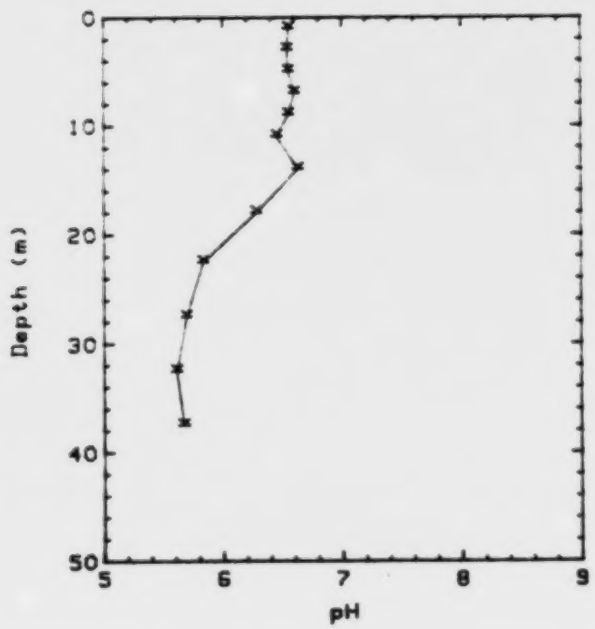



Table 52 con't

# WESTWARD LAKE 82.09.30



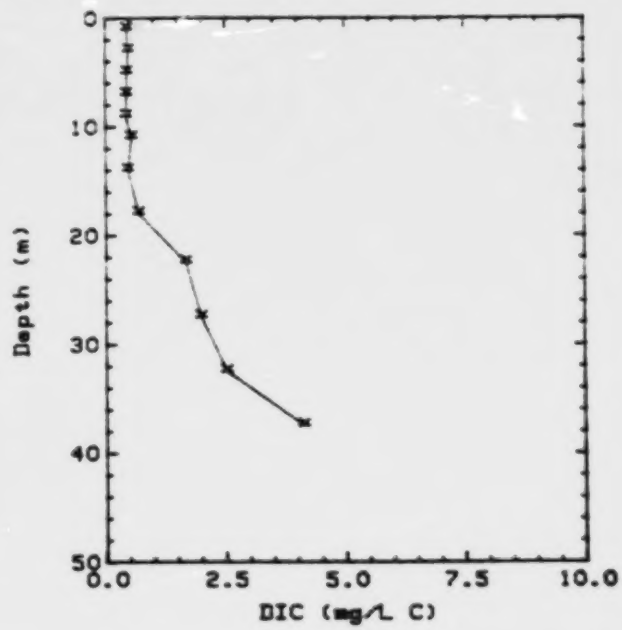
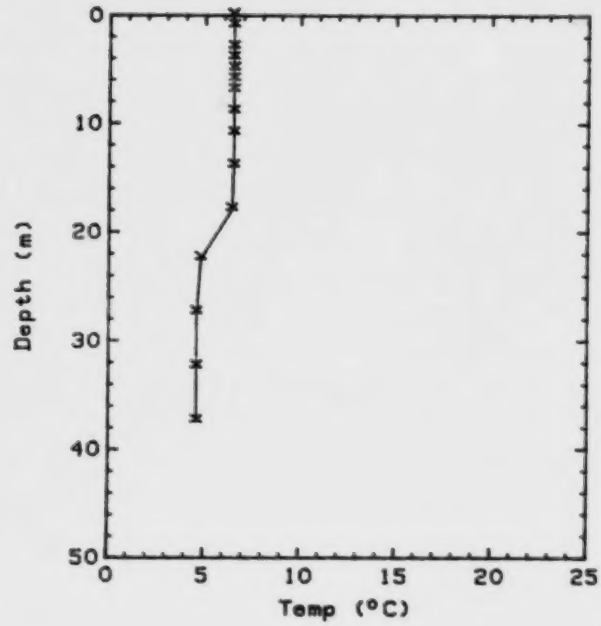
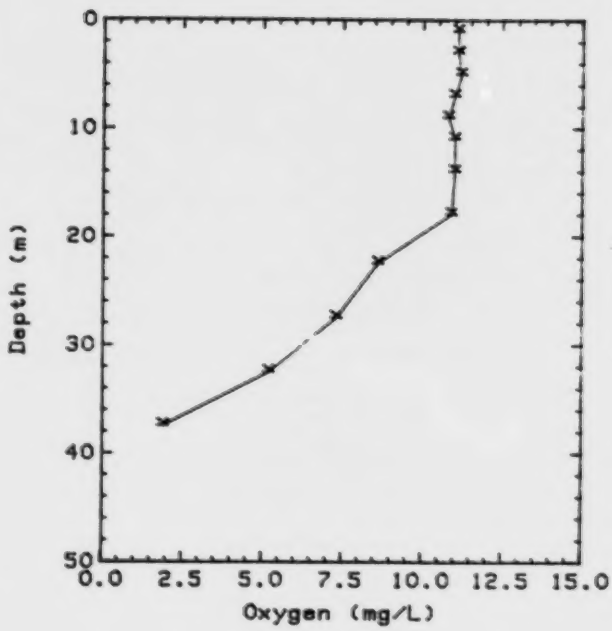
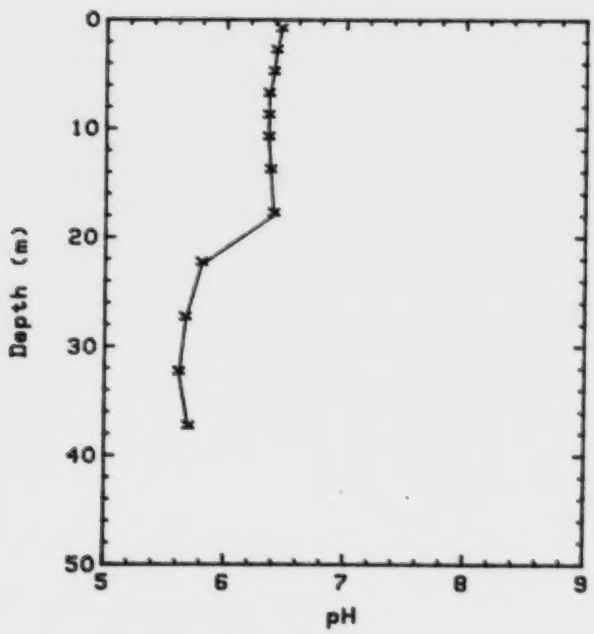



Table 52 con't

# WESTWARD LAKE 82.11.22



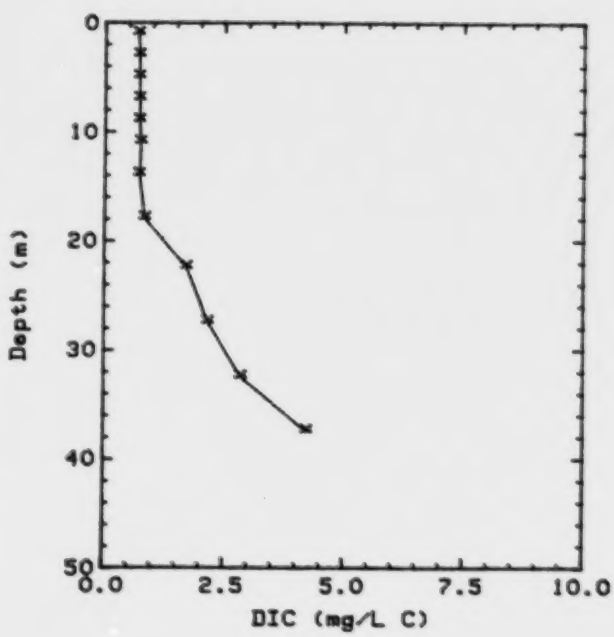
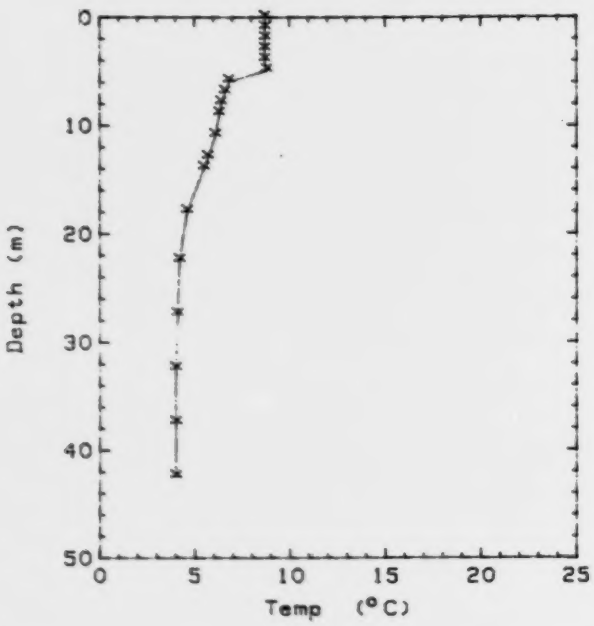
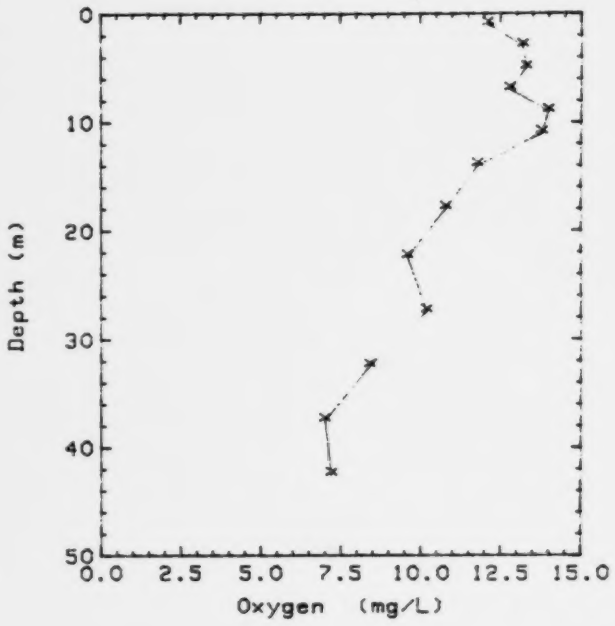
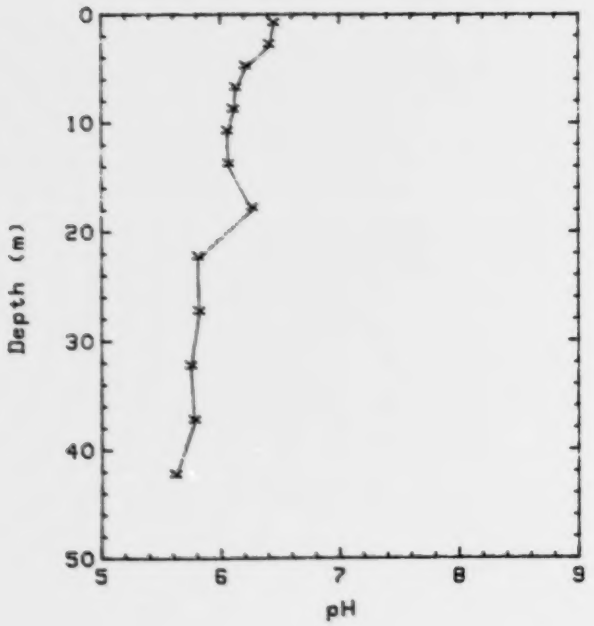



Table 52 con't

WESTWARD LAKE 83.05.16



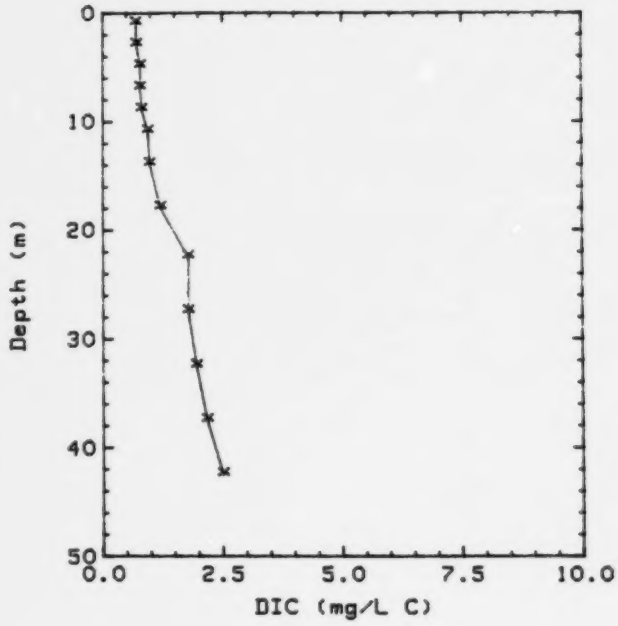
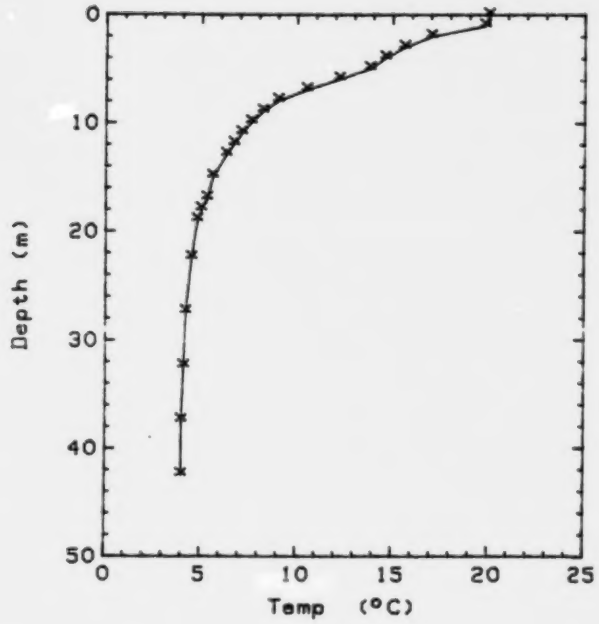
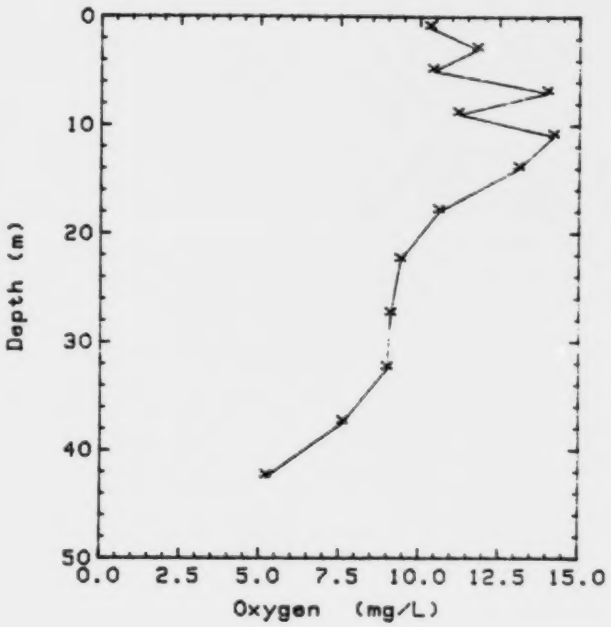
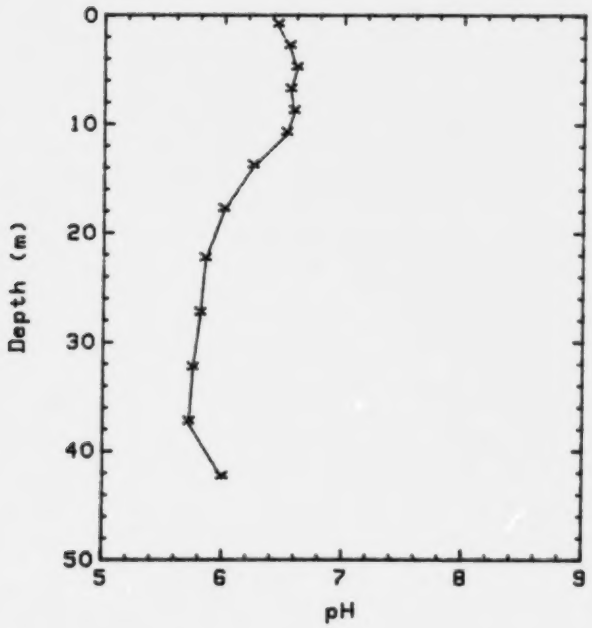



Table 52 con't

# WESTWARD LAKE 83.06.15



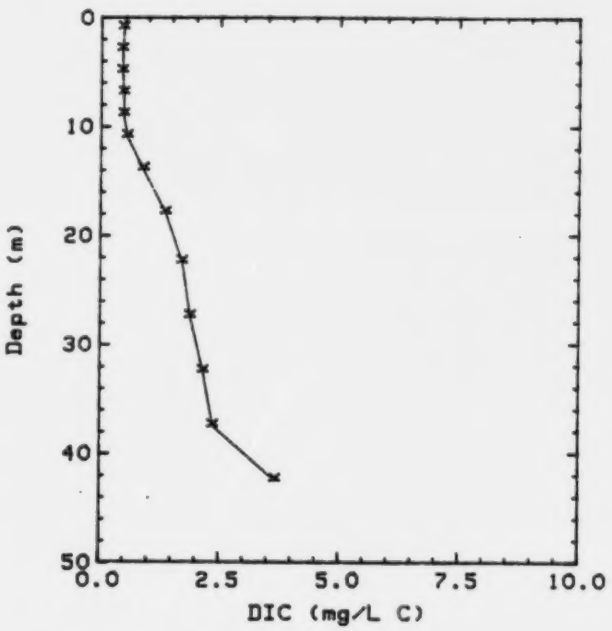
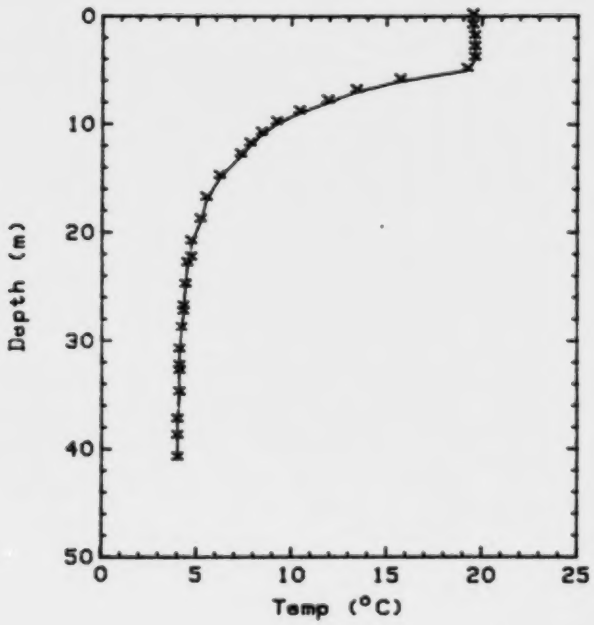
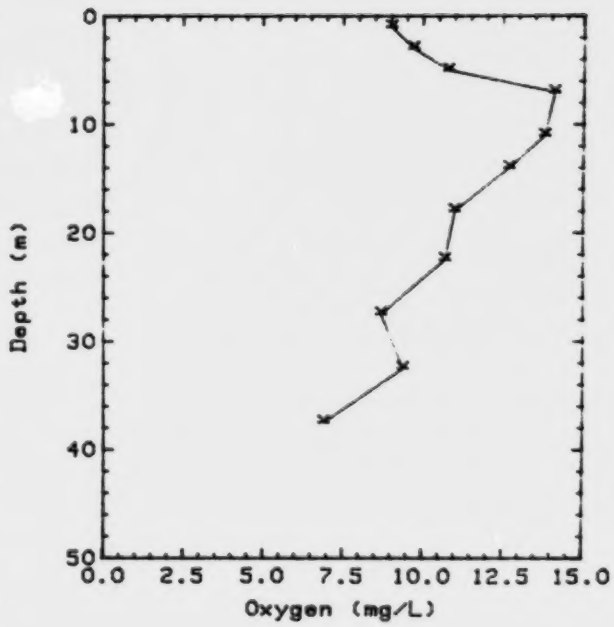
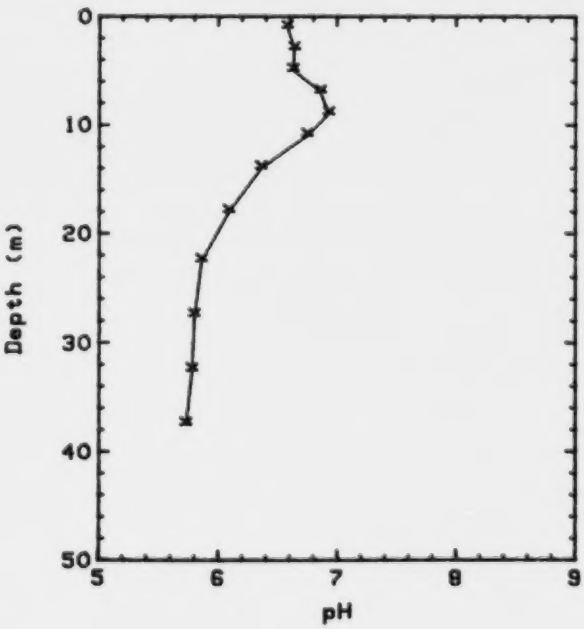



Table 52 con't

# WESTWARD LAKE 83.07.11



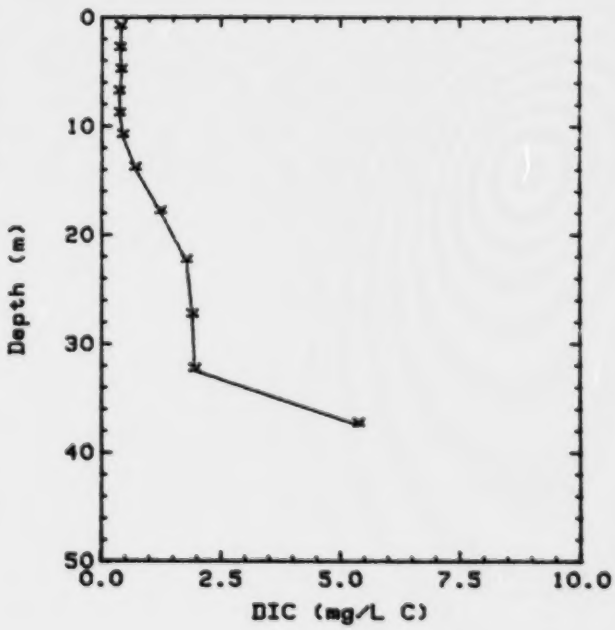
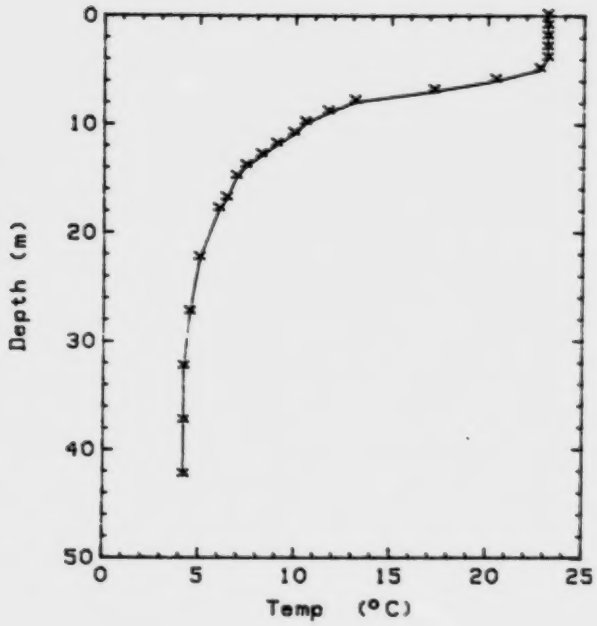
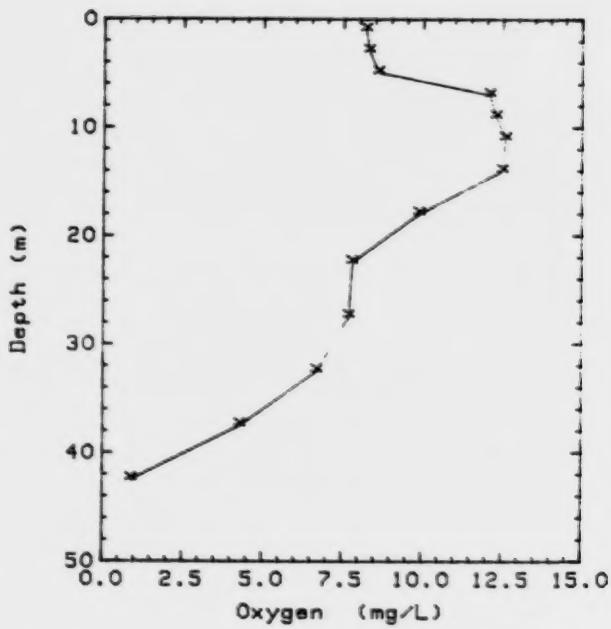
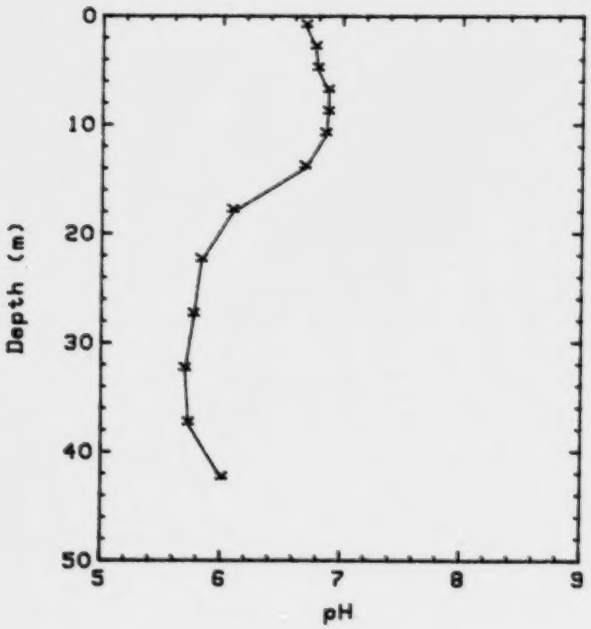



Table 52 con't

WESTWARD LAKE 83.08.08



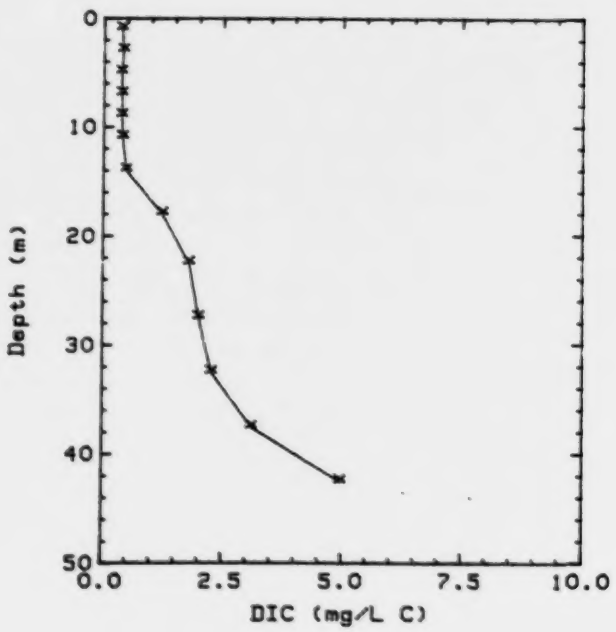
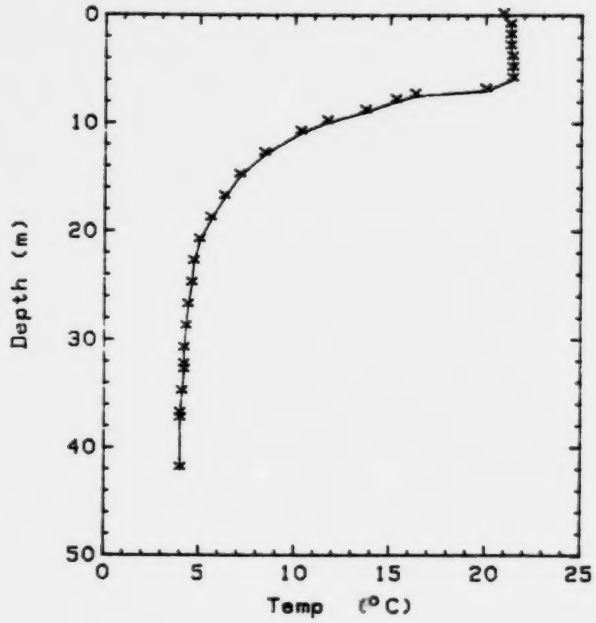
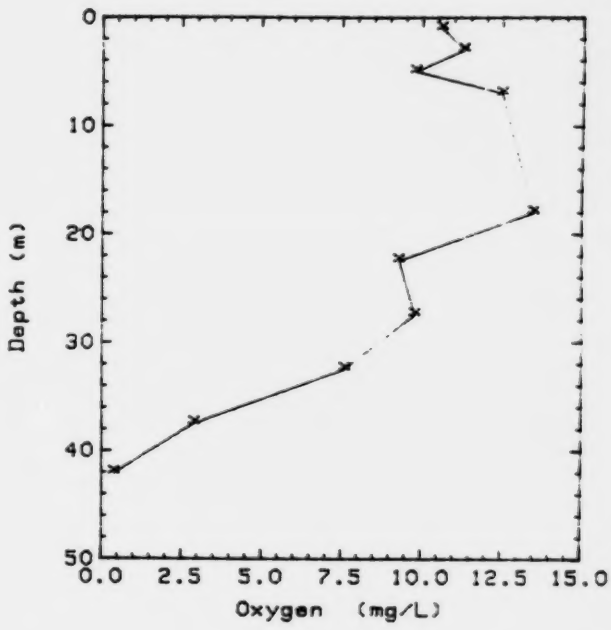
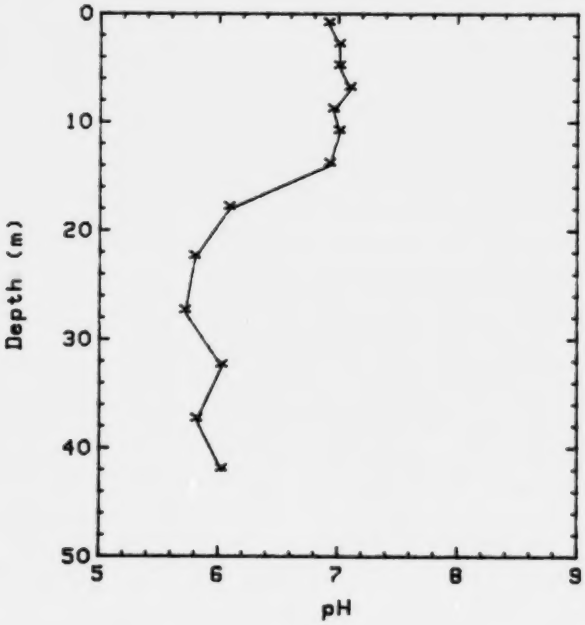



Table 52 con't

# WESTWARD LAKE 83.09.08



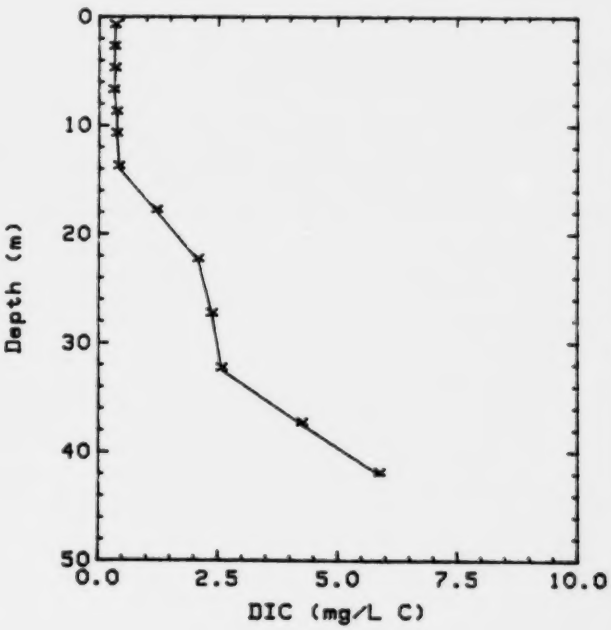
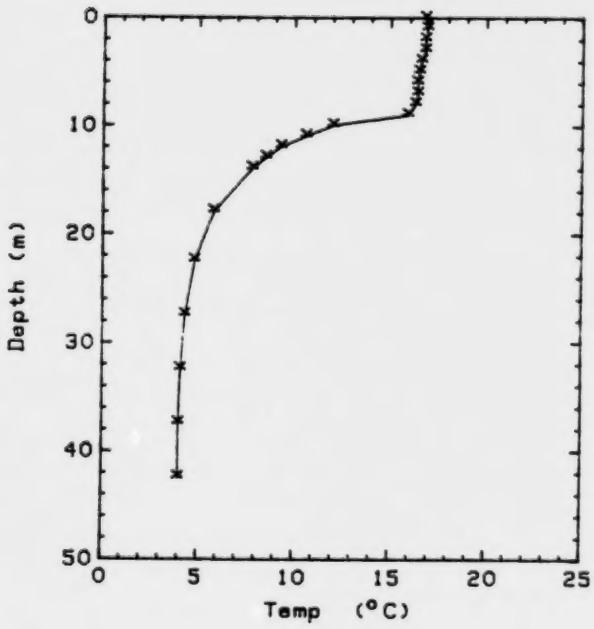
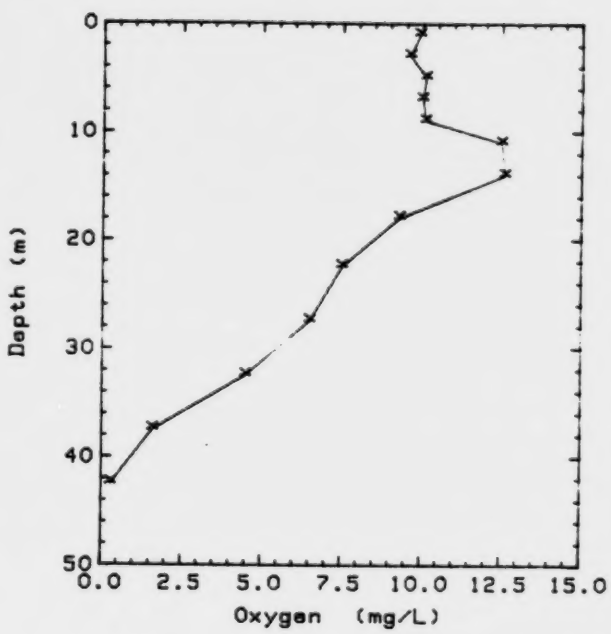
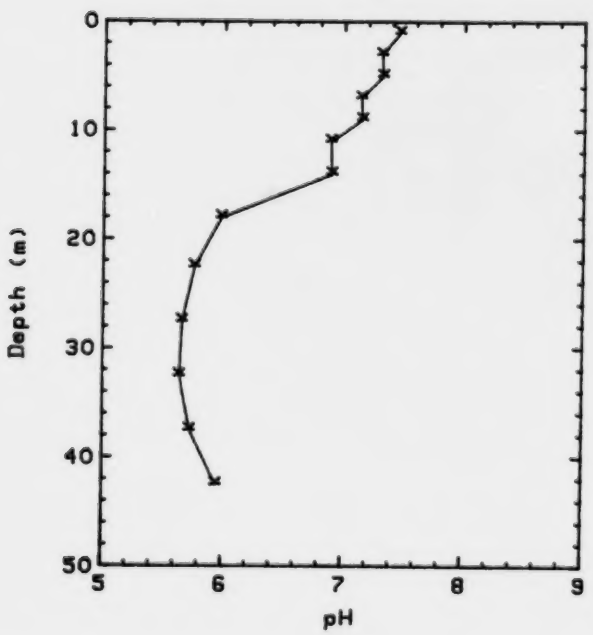



Table 52 con't

# WESTWARD LAKE 83.10.03



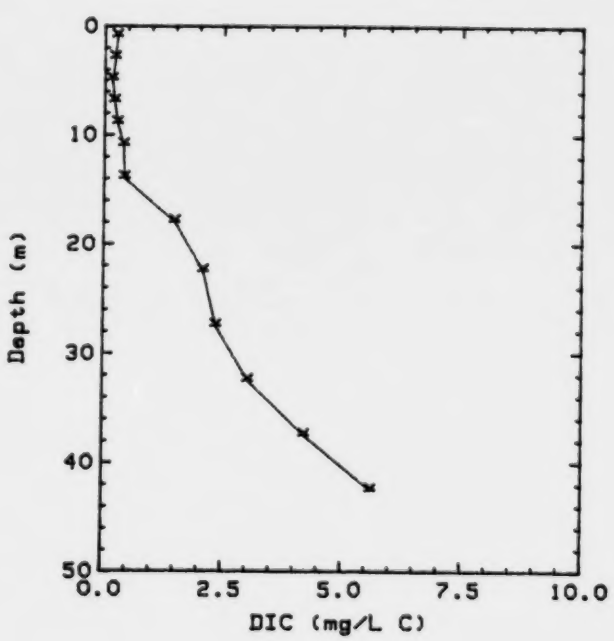
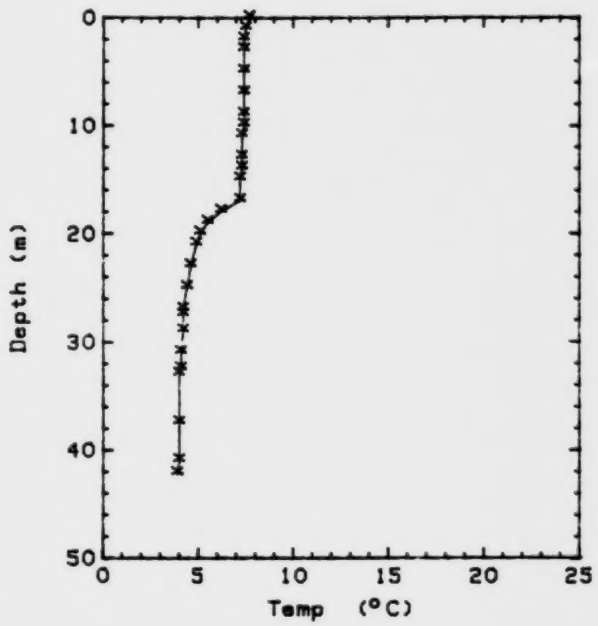
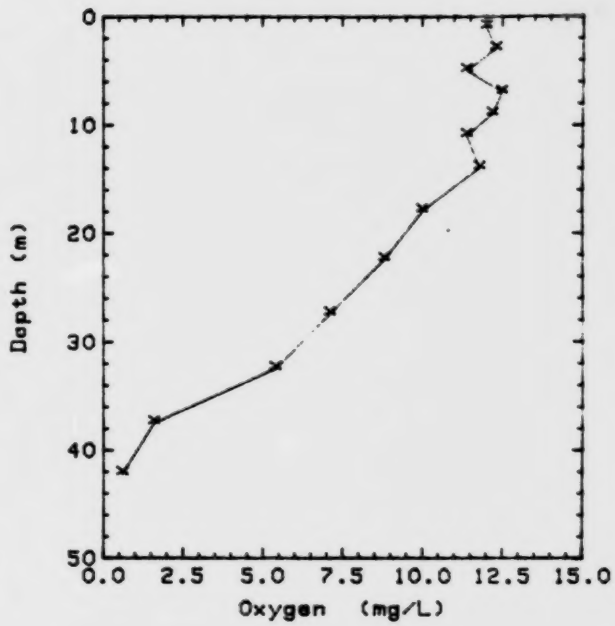
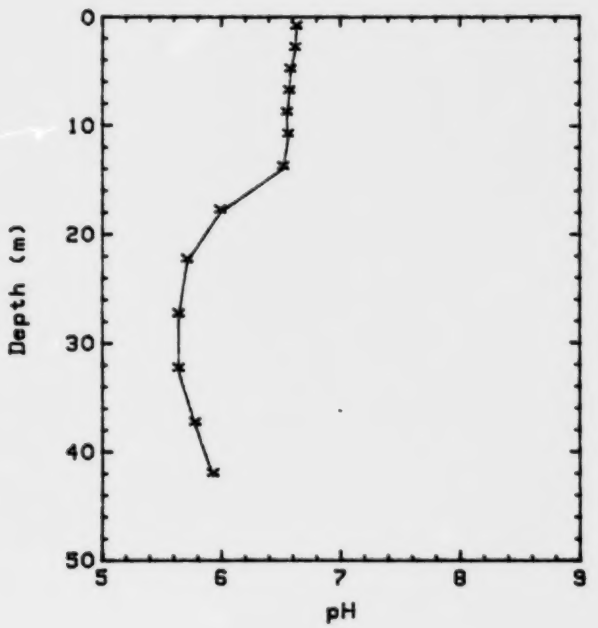



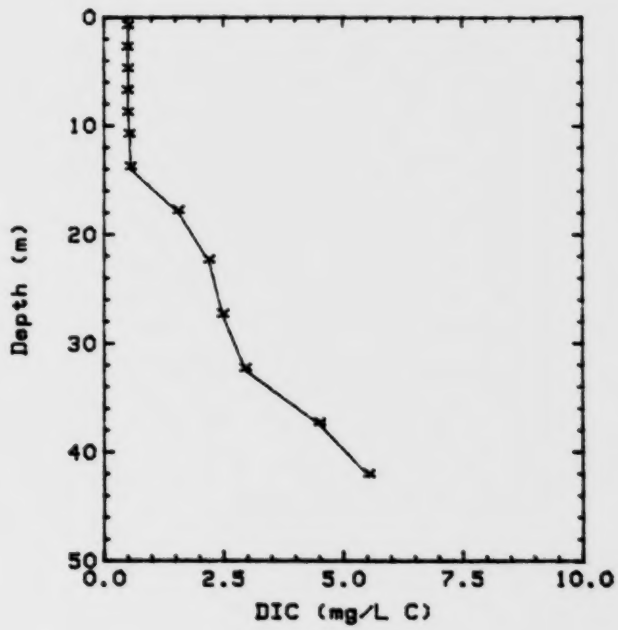
Table 52 con't

# WESTWARD LAKE 83.11.09



Appendix vi: Lake light profile data plots

Table 53 Big Porcupine

# BIG PORCUPINE LAKE

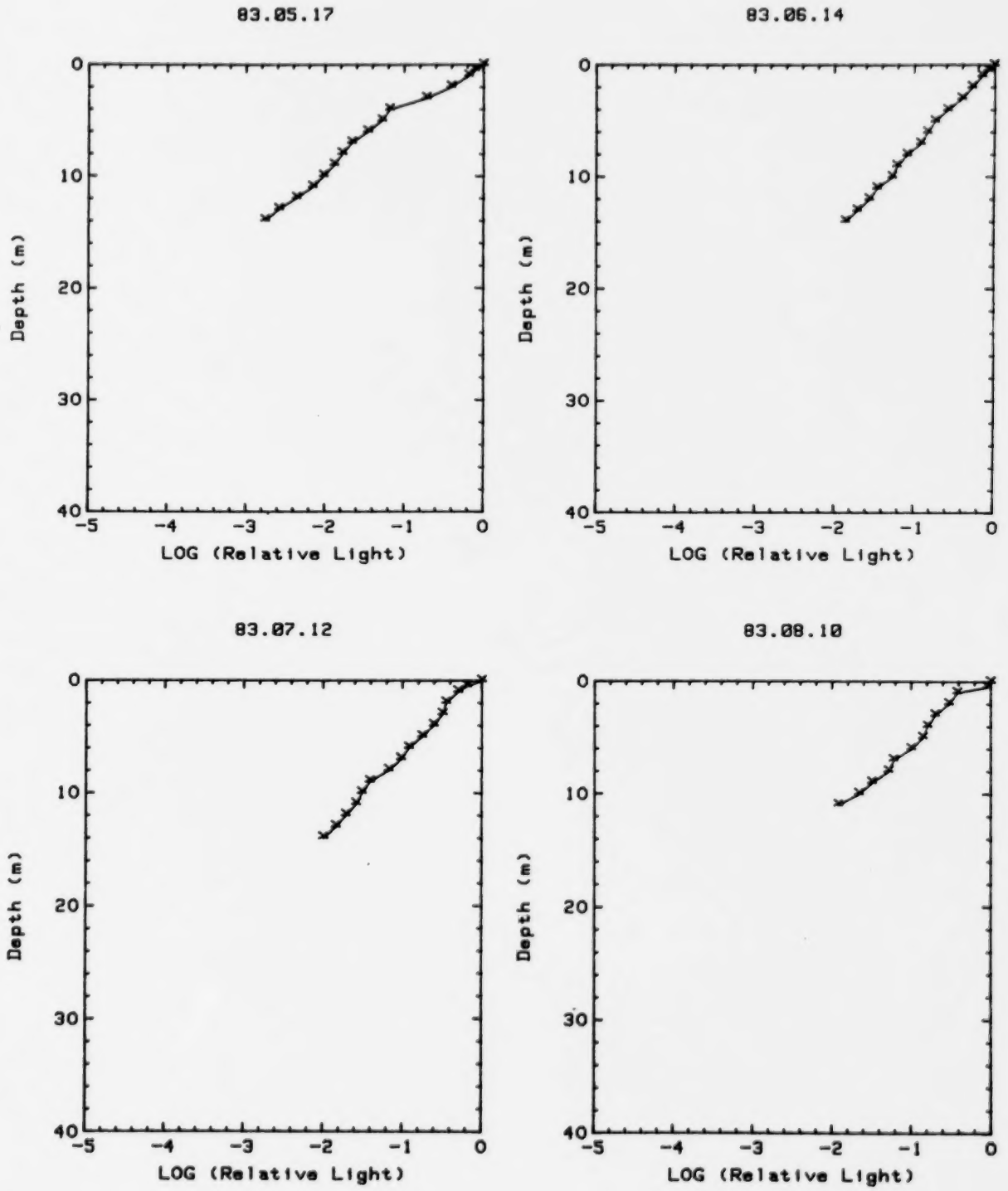


Table 53 con't

# BIG PORCUPINE LAKE

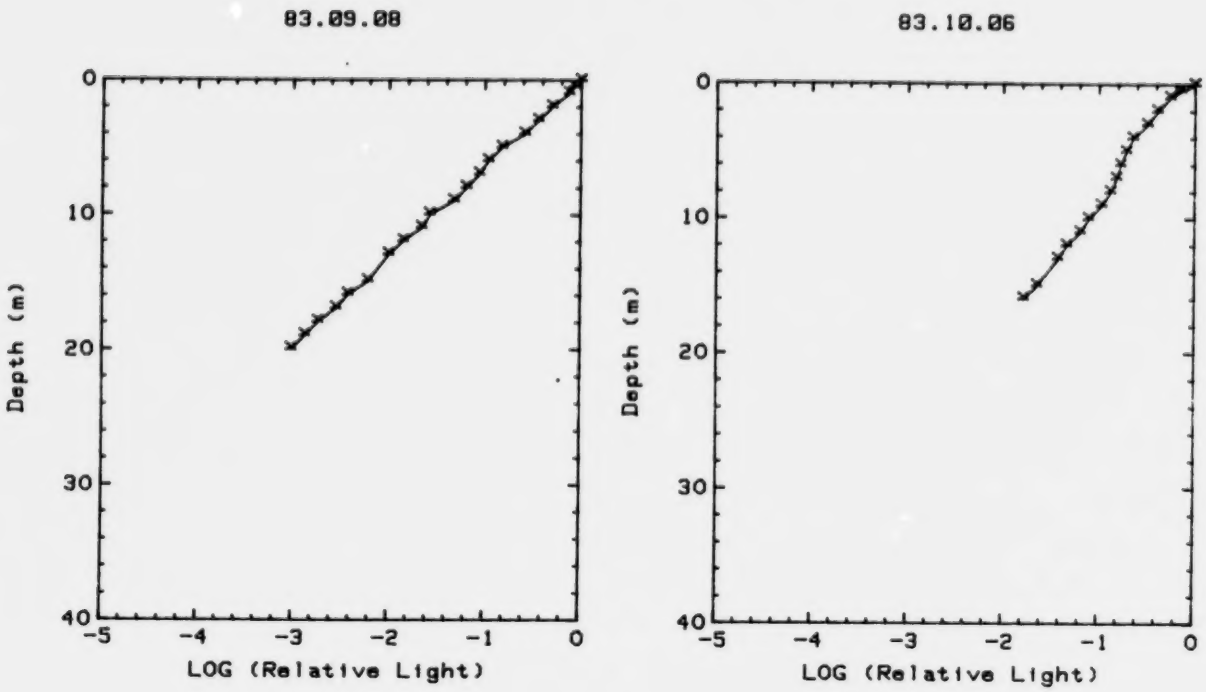


Table 54 Bonnechere Lake

# BONNECHERE LAKE

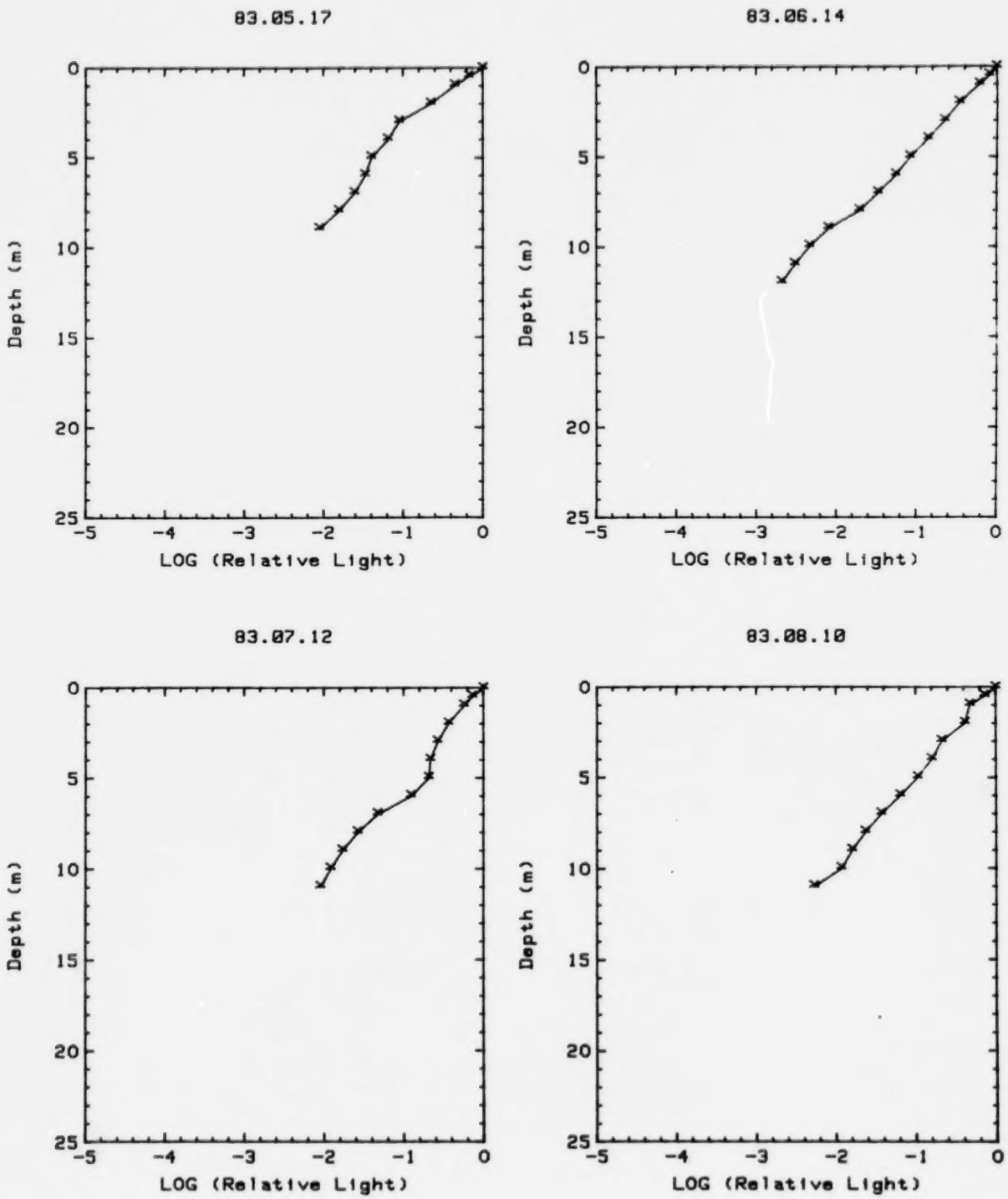


Table 54 con't

# BONNECHERE LAKE

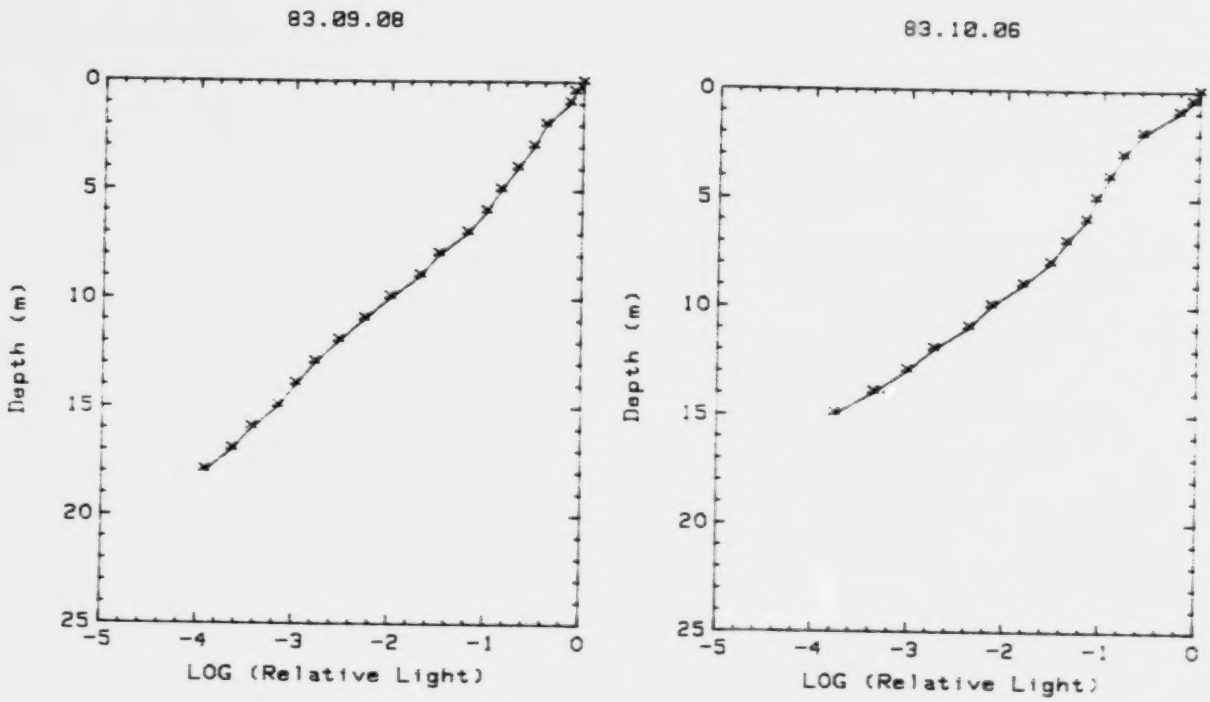
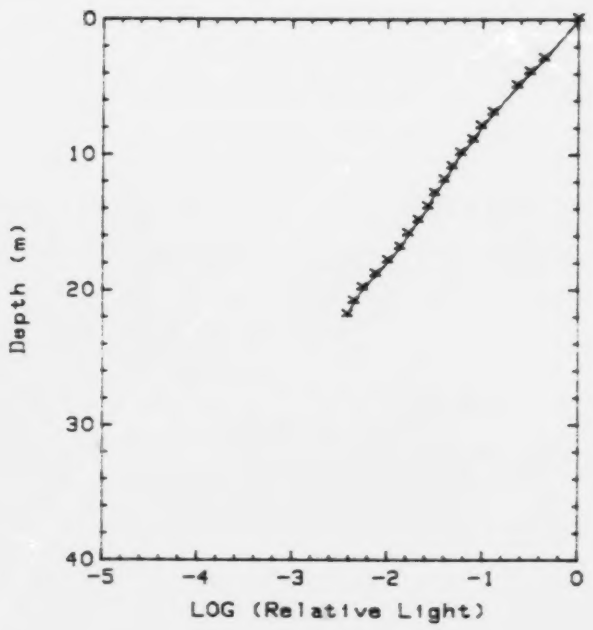


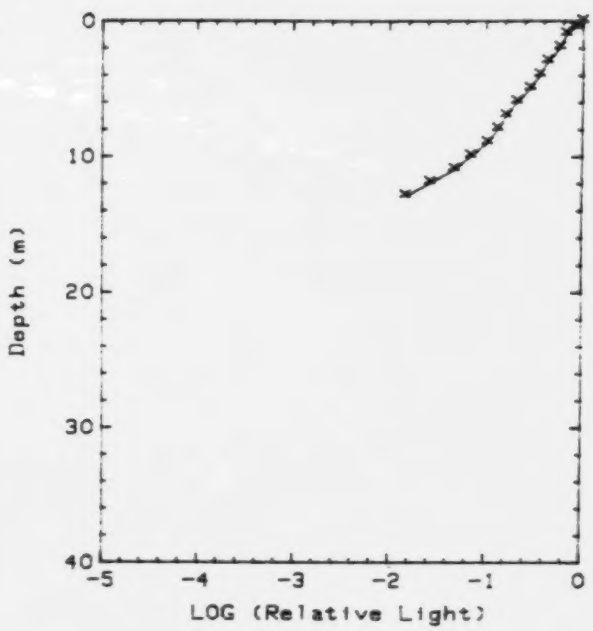
Table 55 Clear Lake

# CLEAR LAKE

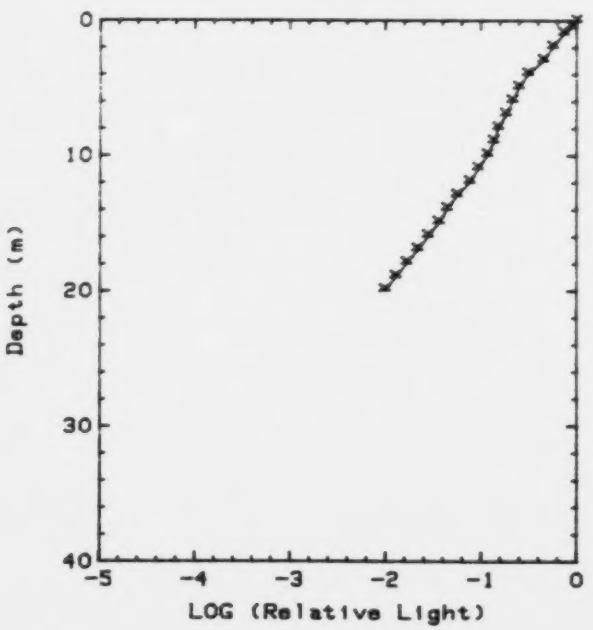
82.05.11




82.06.09




82.07.06




82.08.05

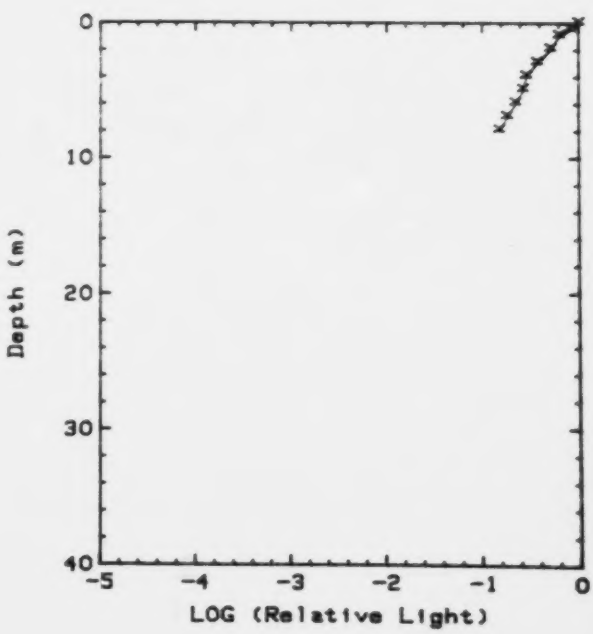


Table 55 con't

# CLEAR LAKE

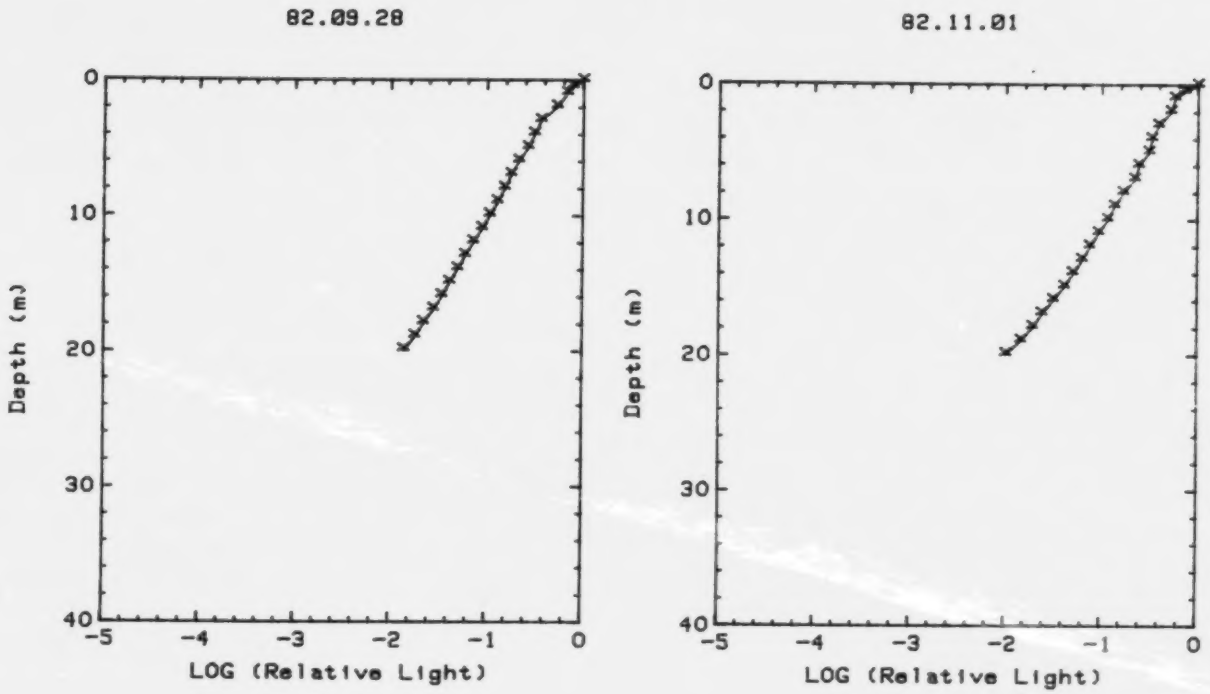


Table 55 con't

# CLEAR LAKE

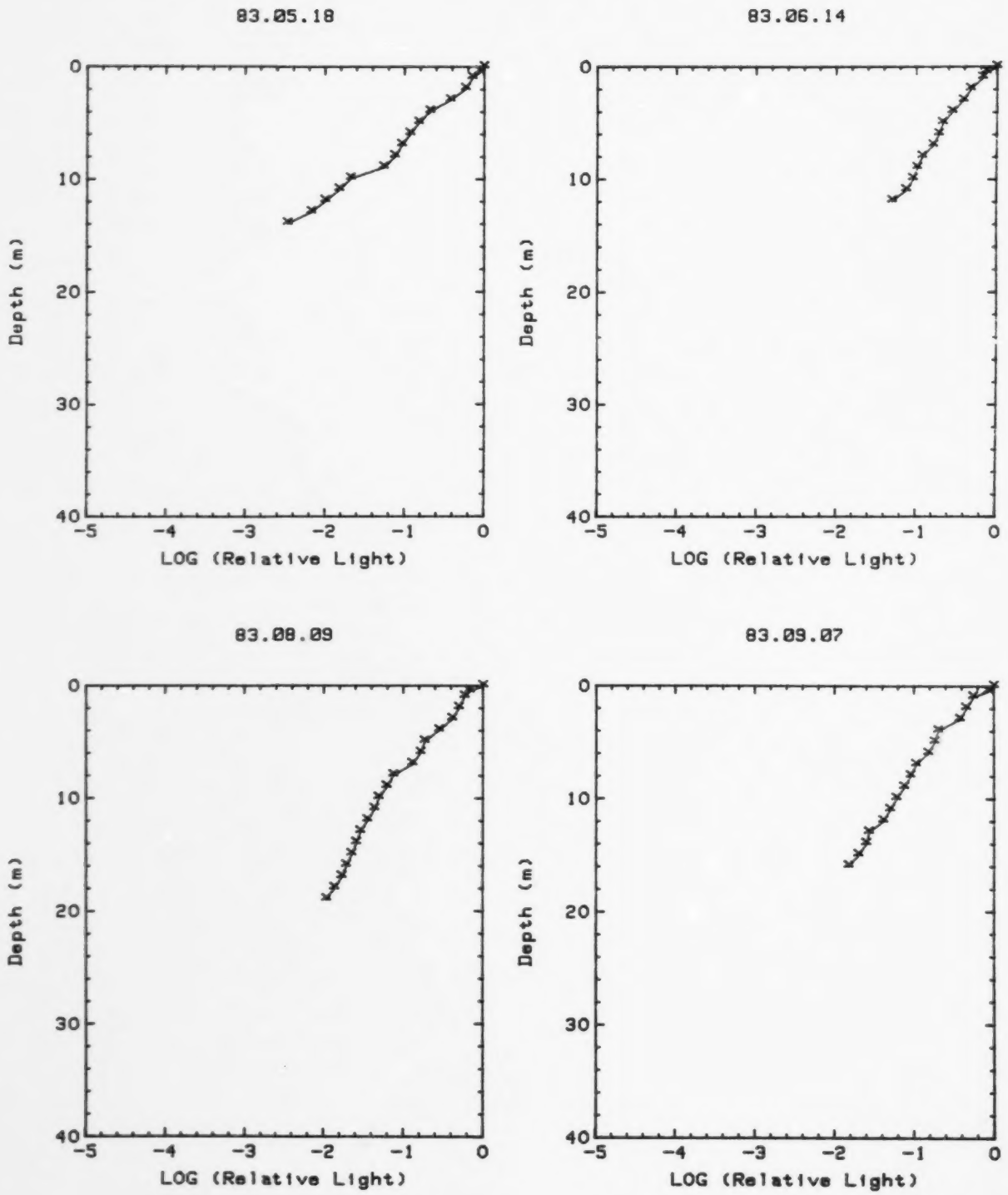


Table 55 con't

# CLEAR LAKE

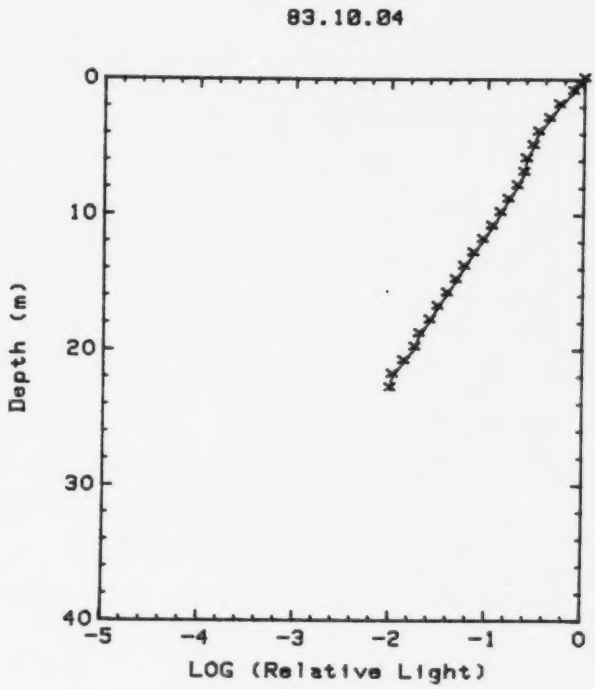


Table 56 Crown Lake

# CROWN LAKE

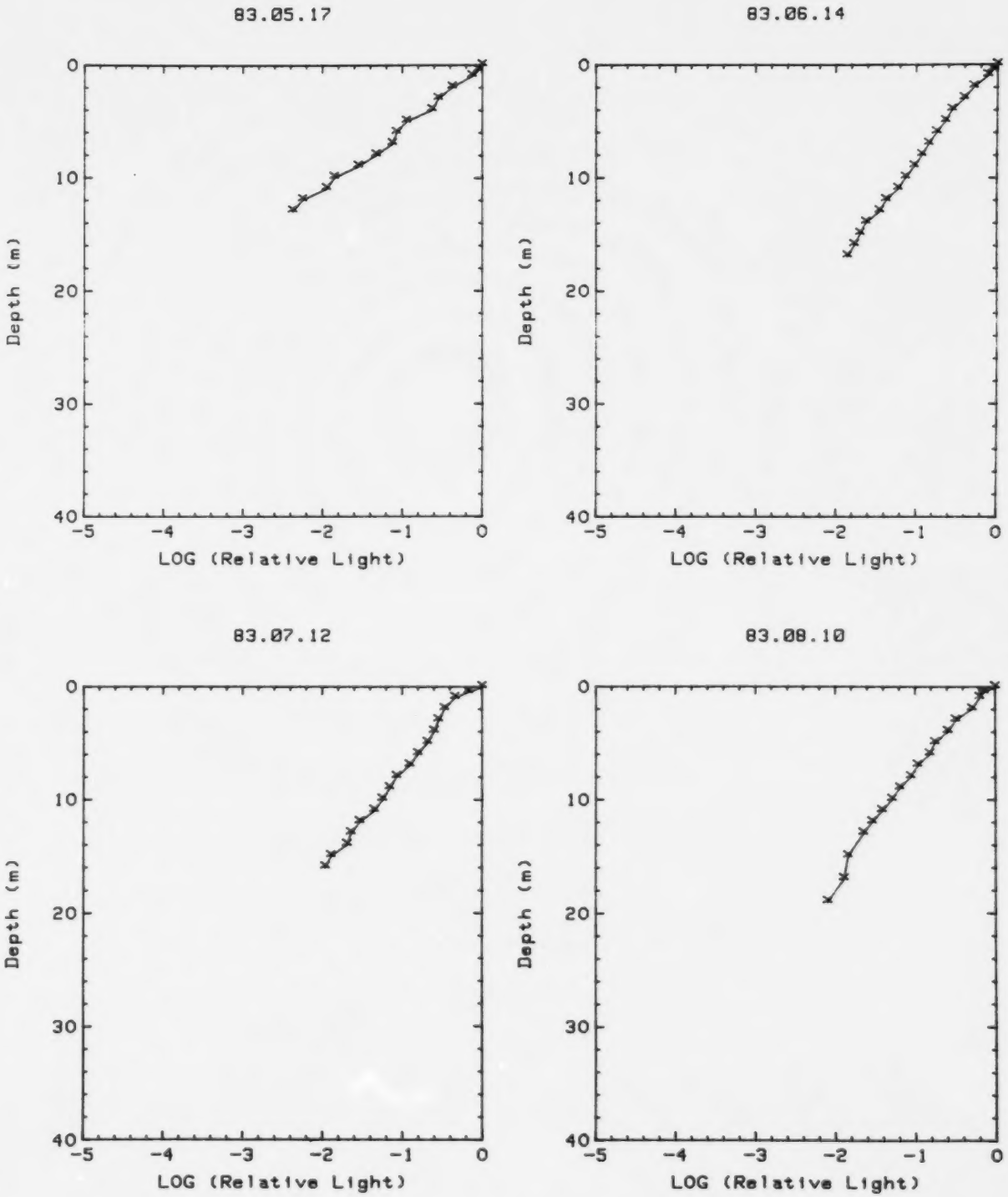


Table 56 con't

# CROWN LAKE

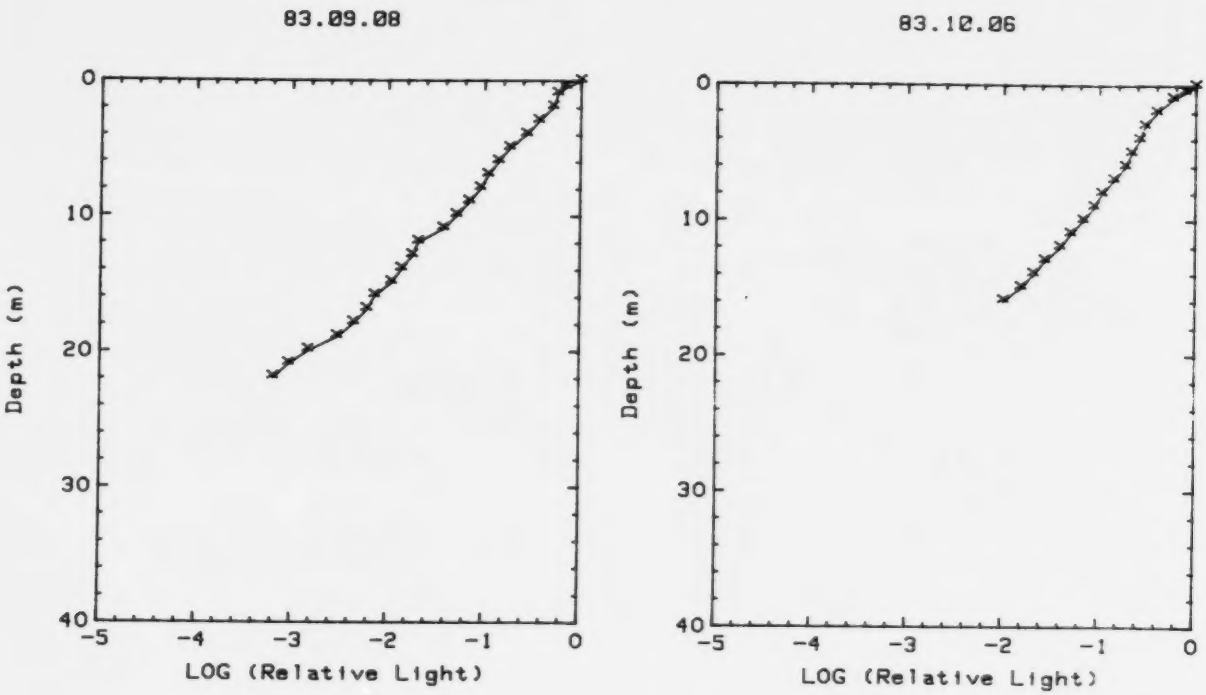


Table 57 con't

# DELANO LAKE

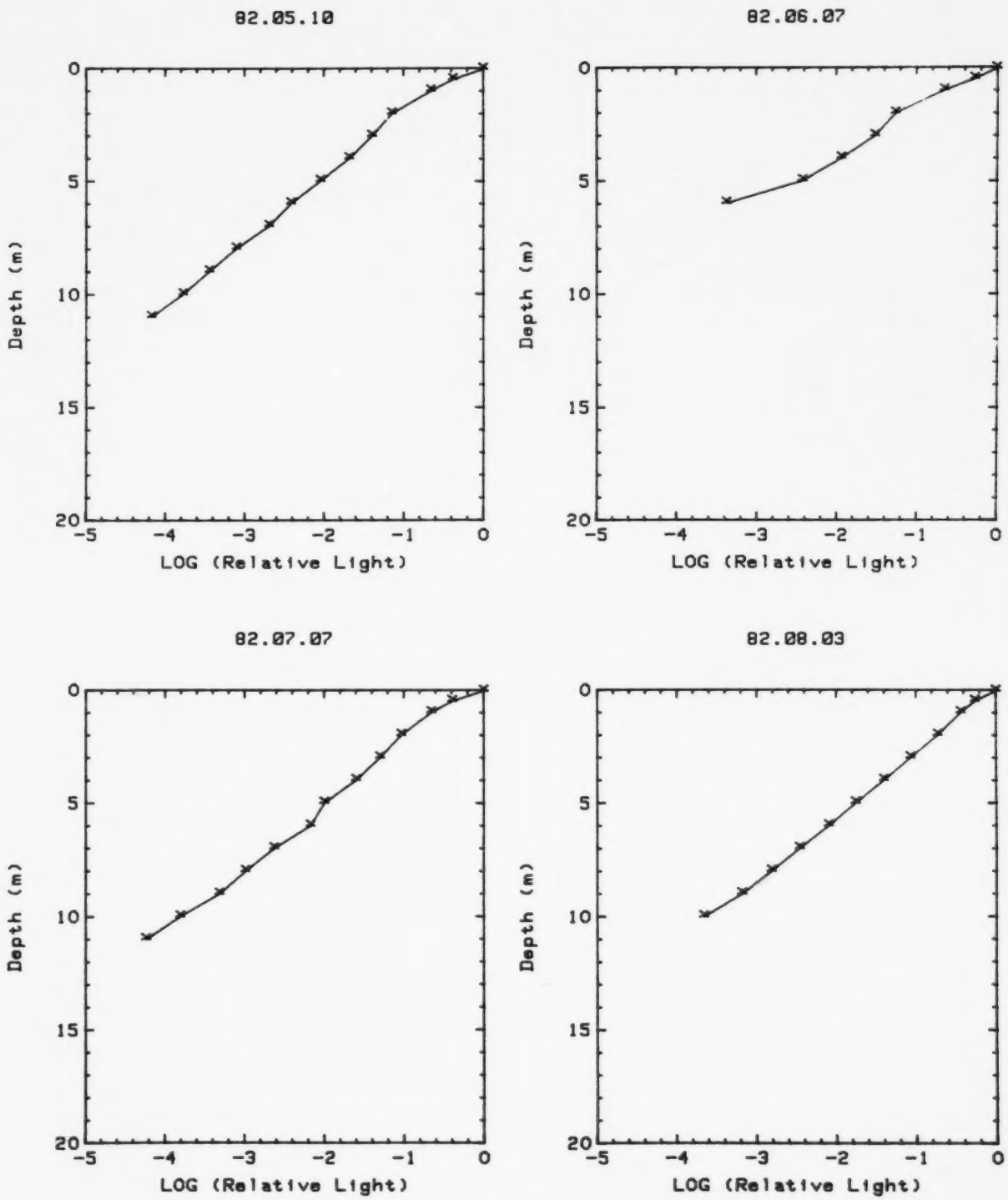
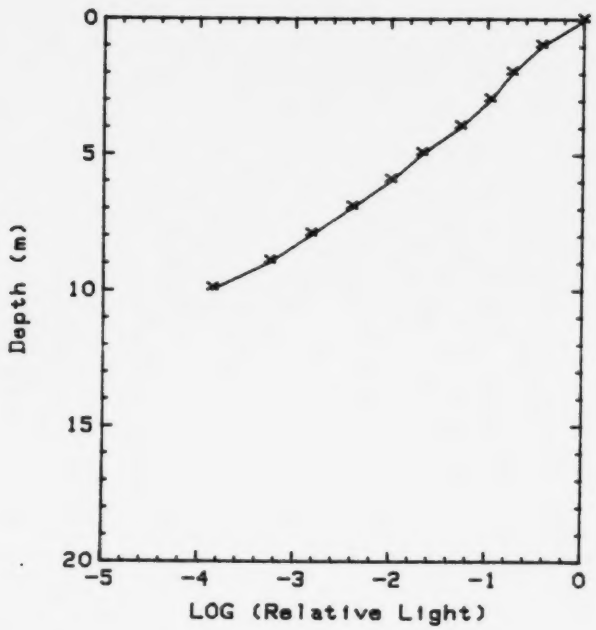


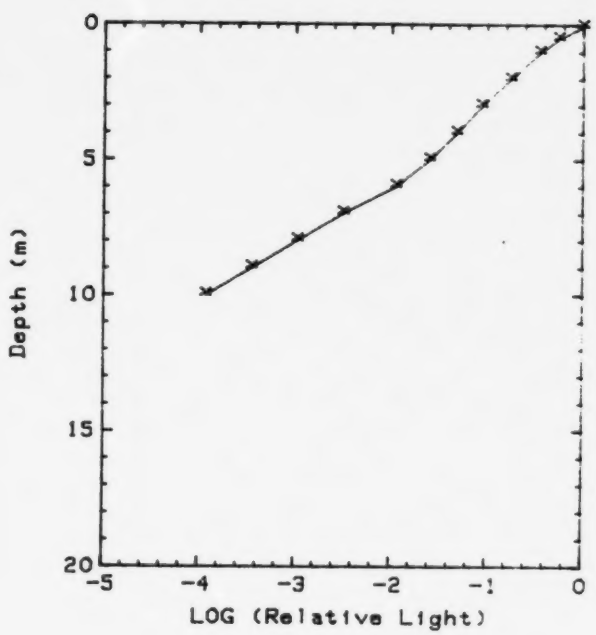
Table 57 con't

# DELANO LAKE

82.09.01




82.09.28




82.11.01

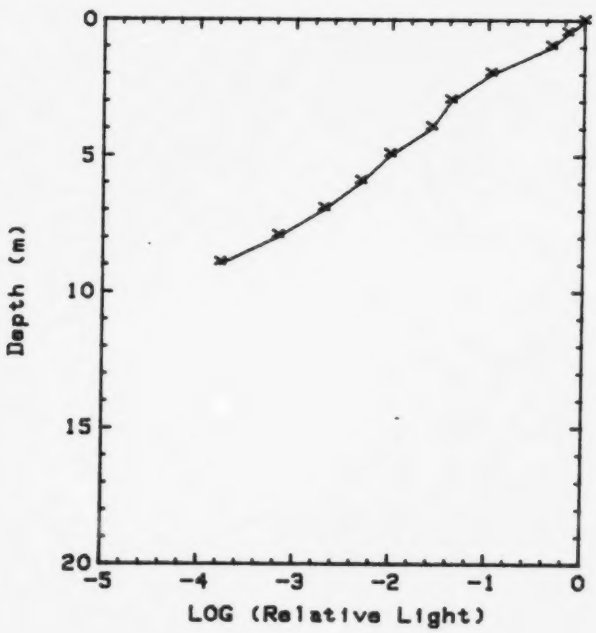
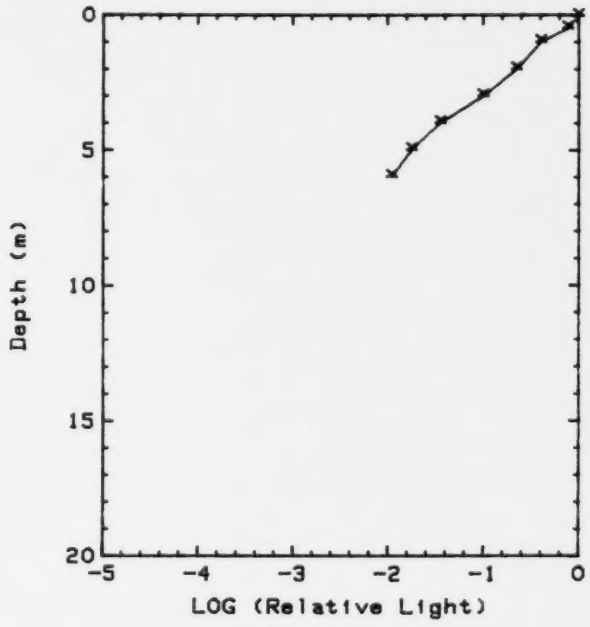


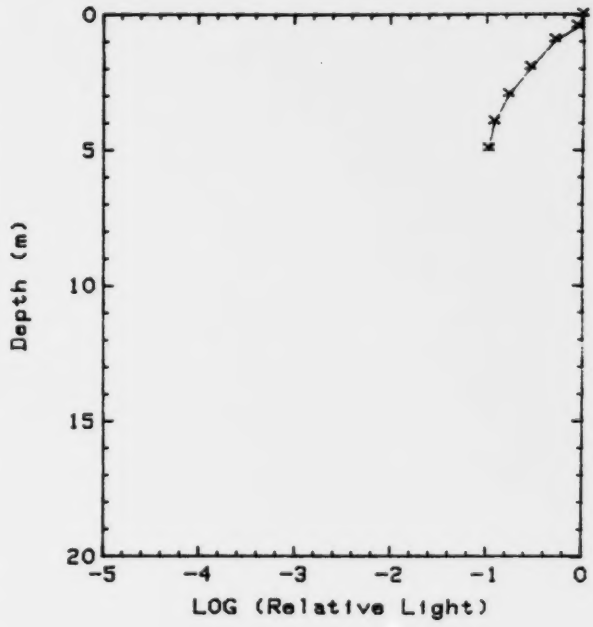
Table 57 con't

# DELANO LAKE

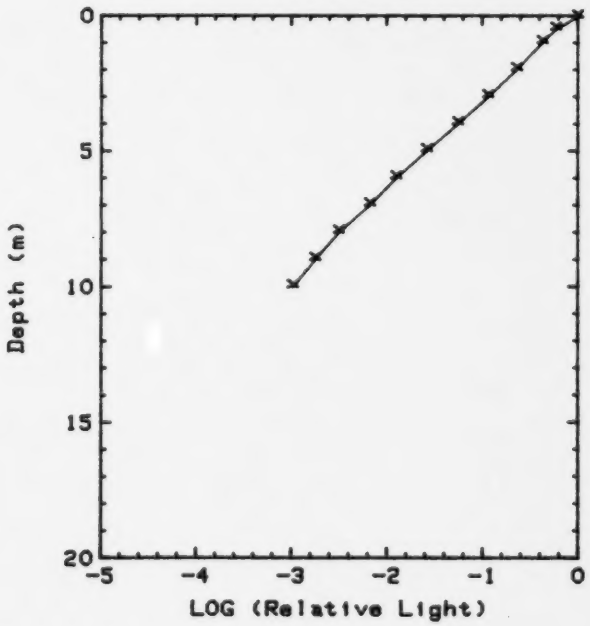
83.07.11




83.08.08




83.09.07




83.10.03

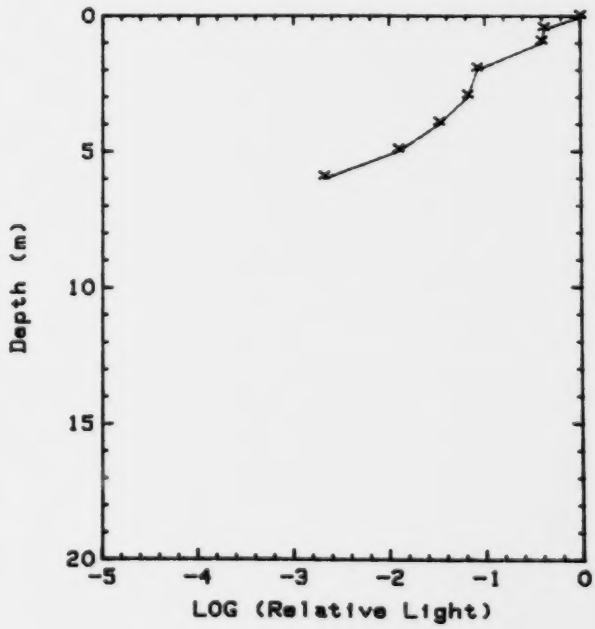


Table 58 Kimball Lake

# KIMBALL LAKE

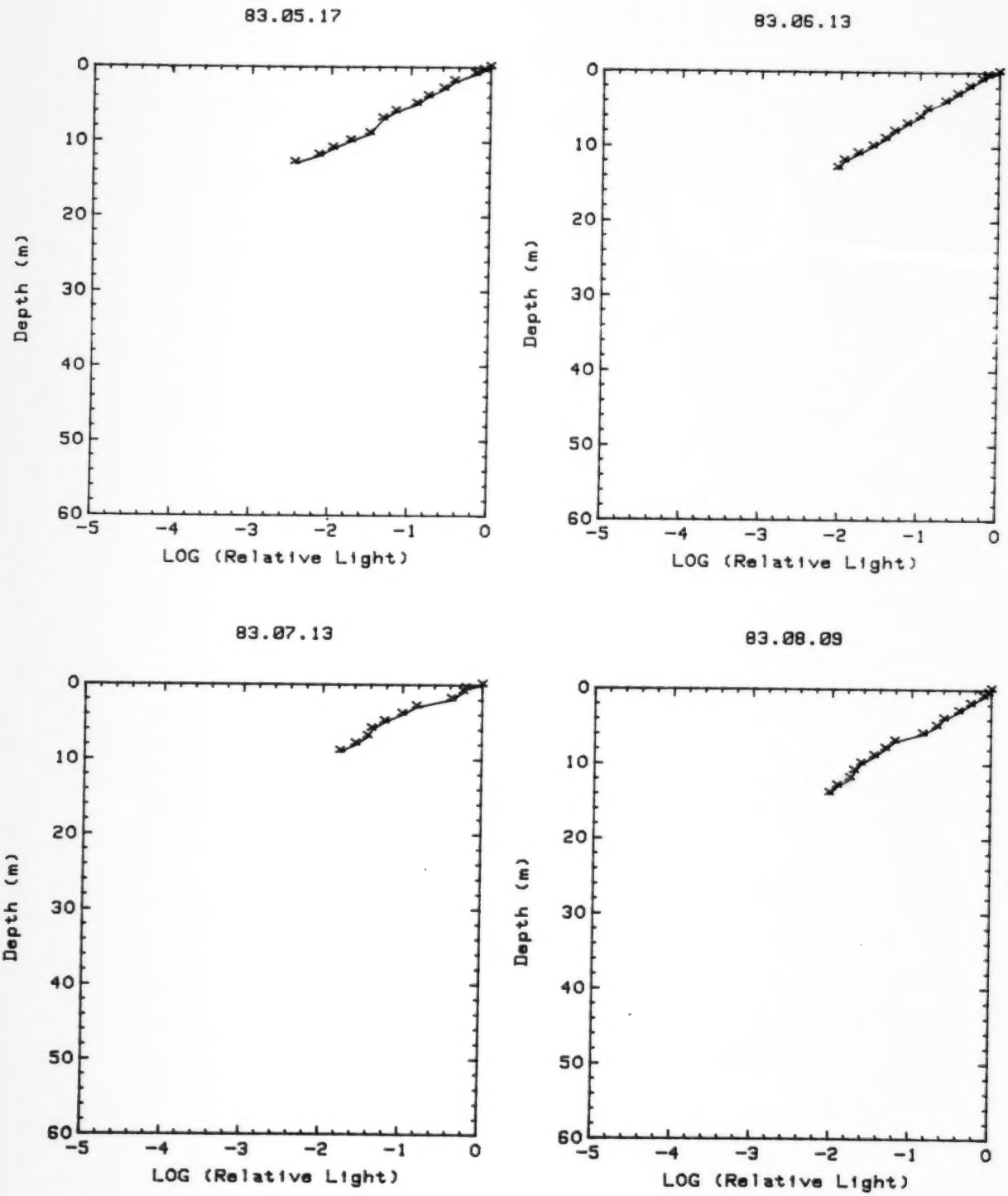


Table 58 con't

# KIMBALL LAKE

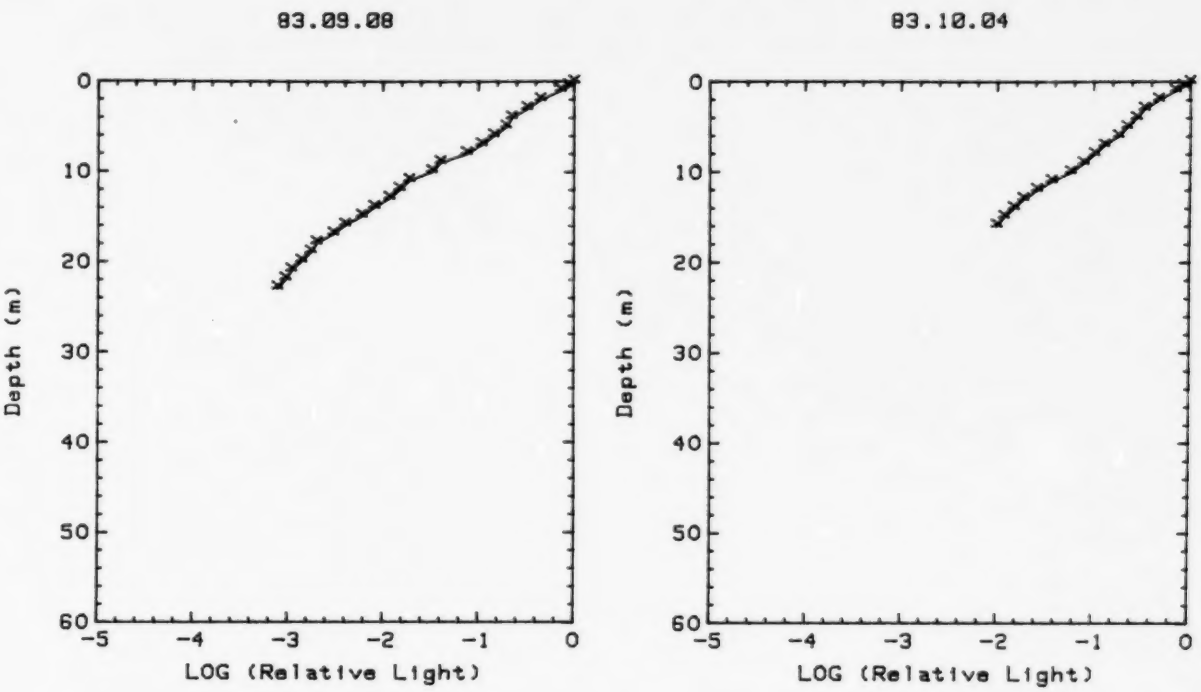


Table 59 Lake Louisa

# LAKE LOUISA

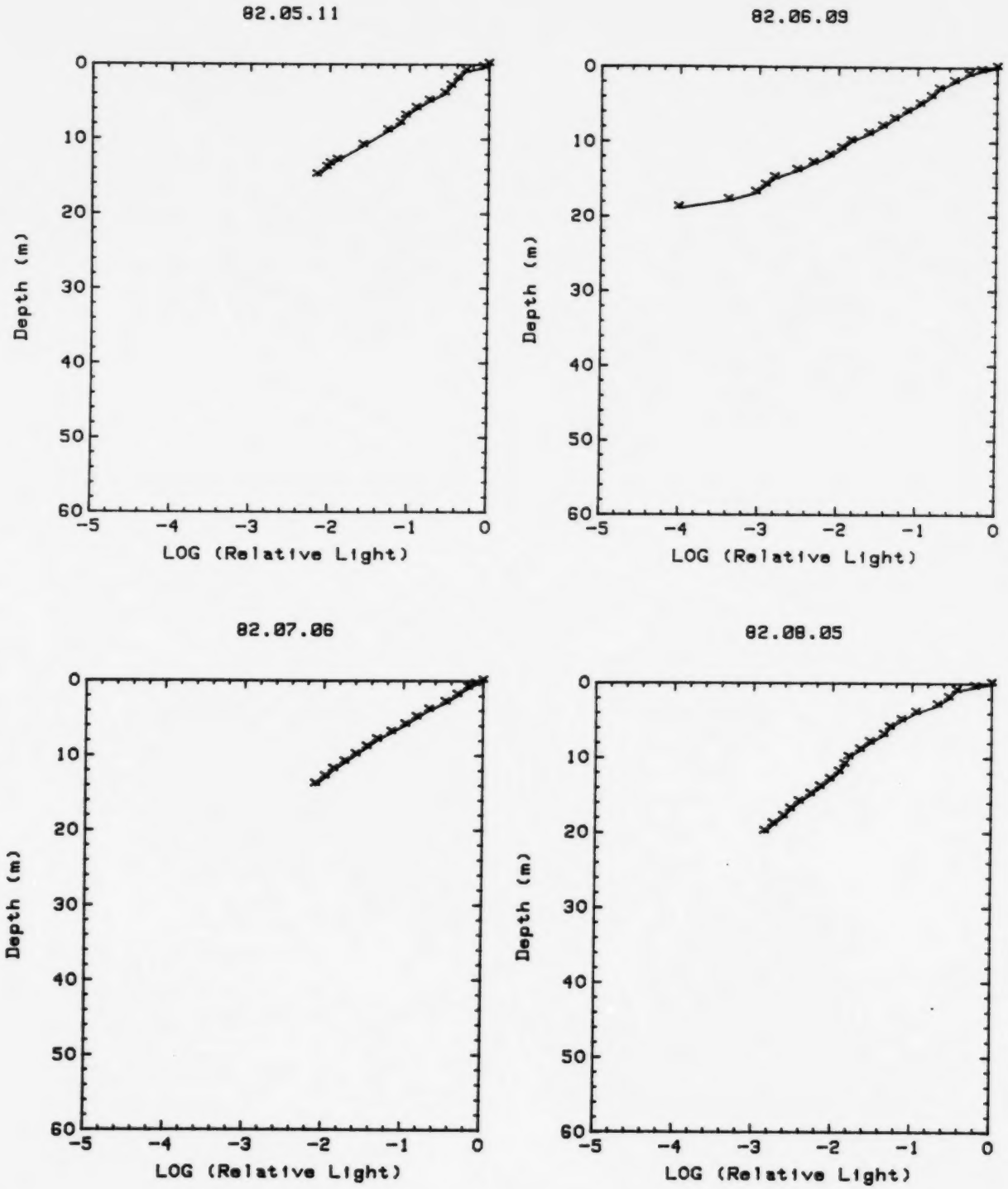
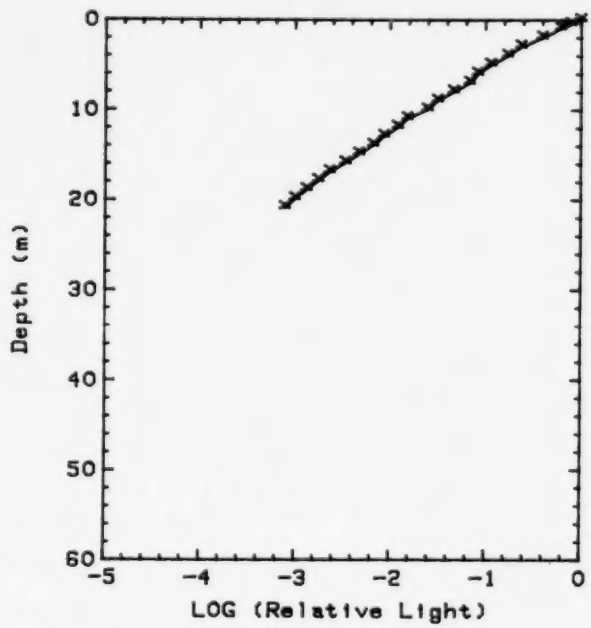


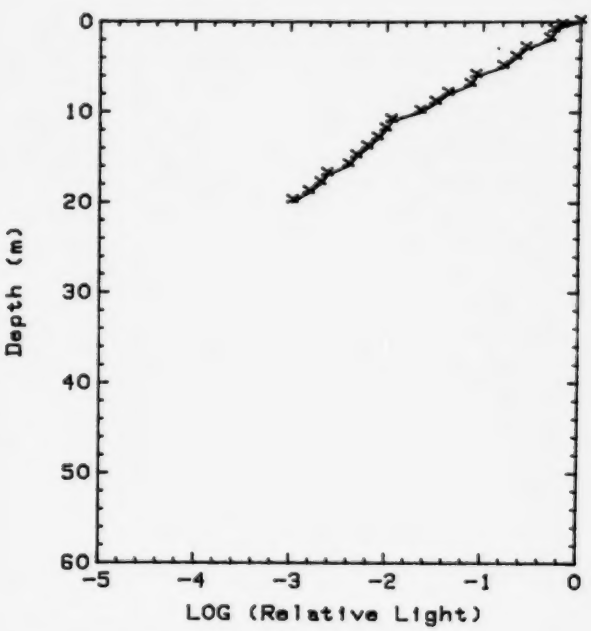
Table 59 con't

# LAKE LOUISA

82.09.08




82.09.30




82.11.01

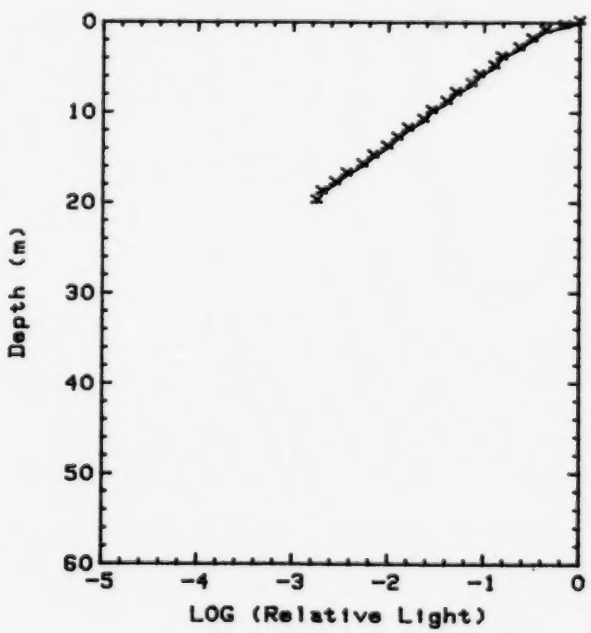


Table 59 con't

# LAKE LOUISA

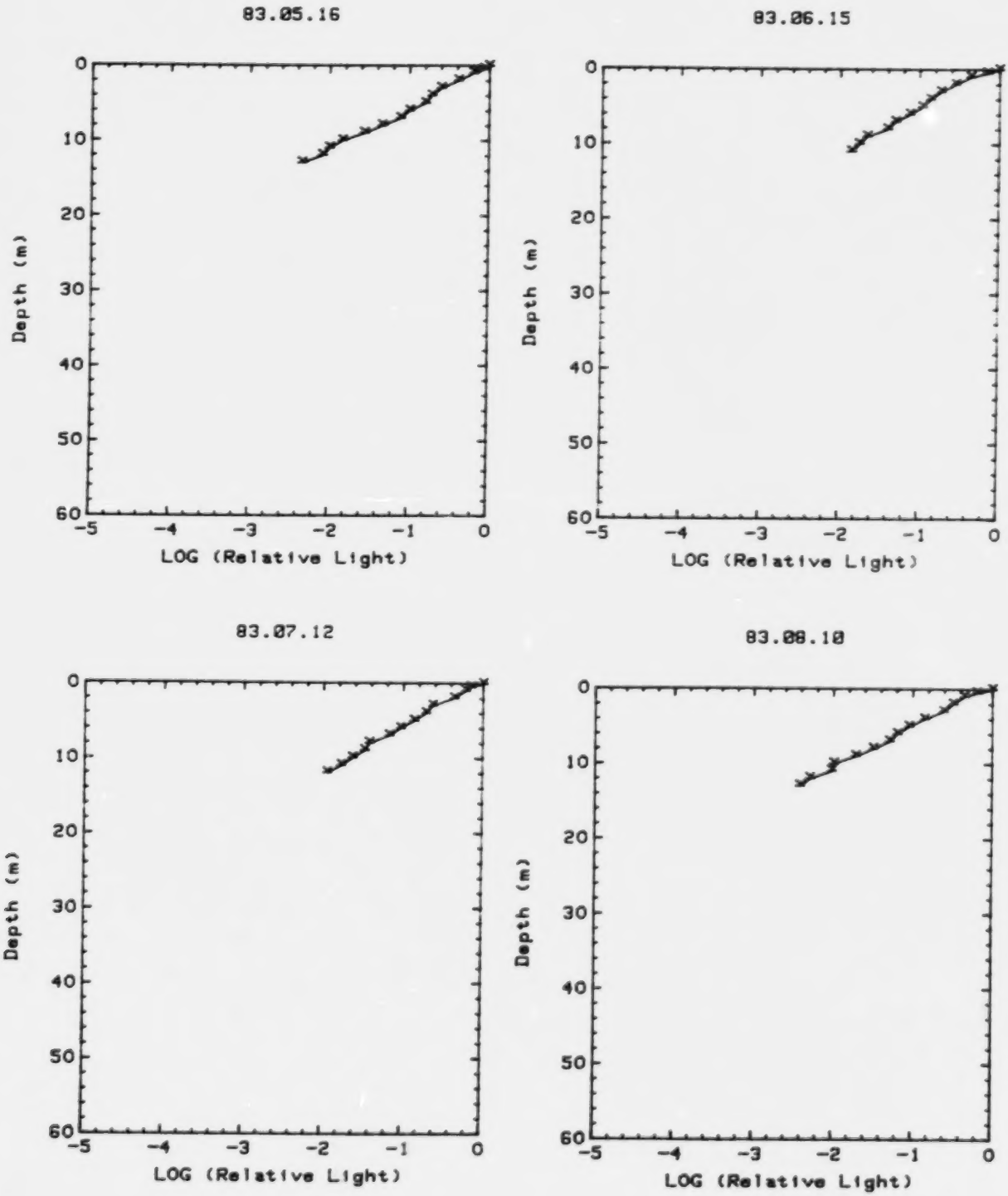


Table 59 con't

# LAKE LOUISA

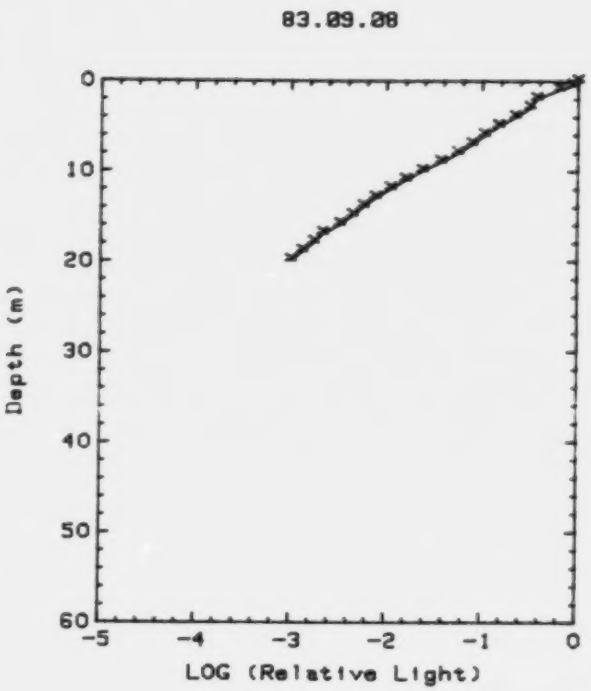


Table 60 Nunikani Lake

# NUNIKANI LAKE

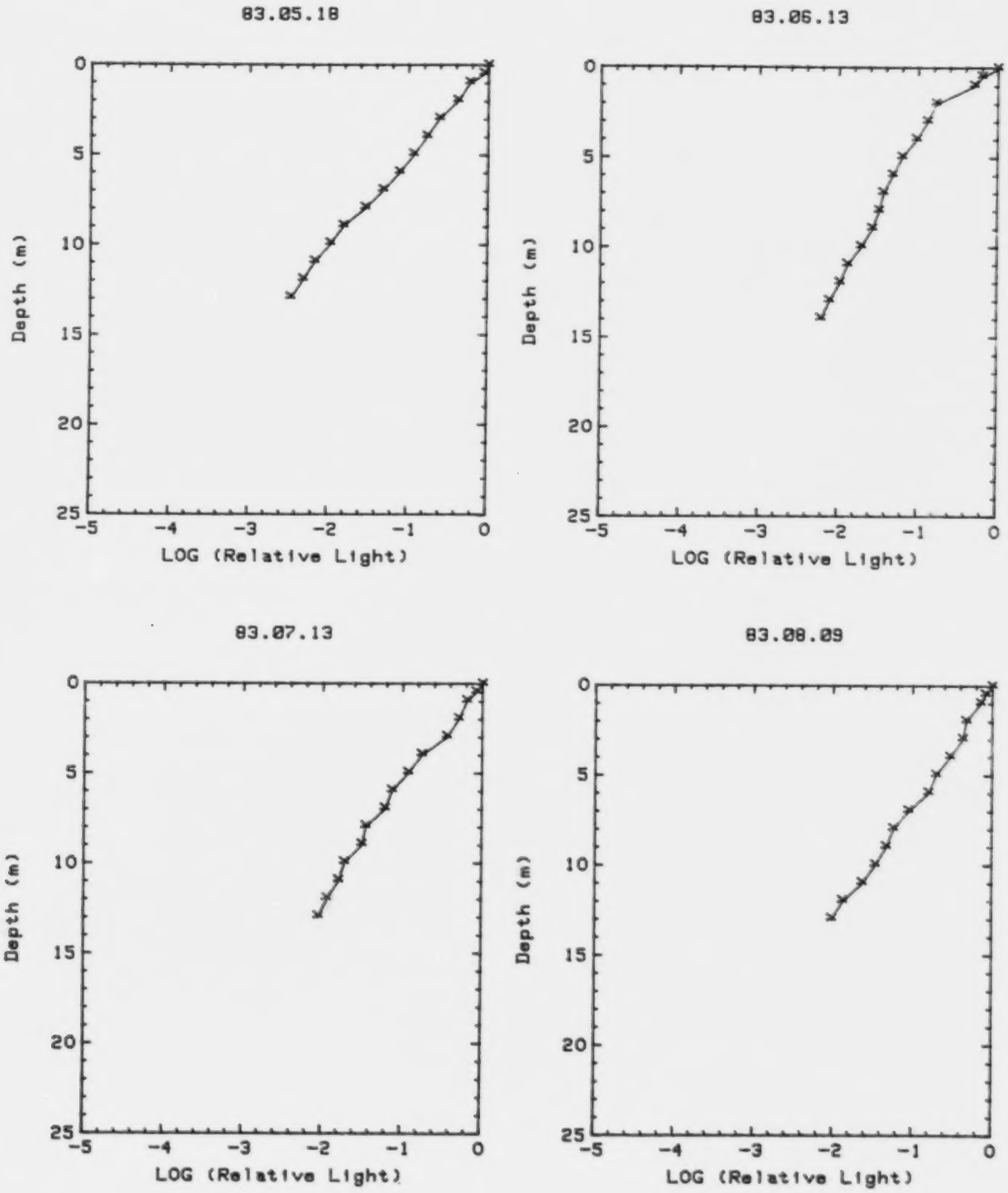


Table 60 con't

# NUNIKANI LAKE

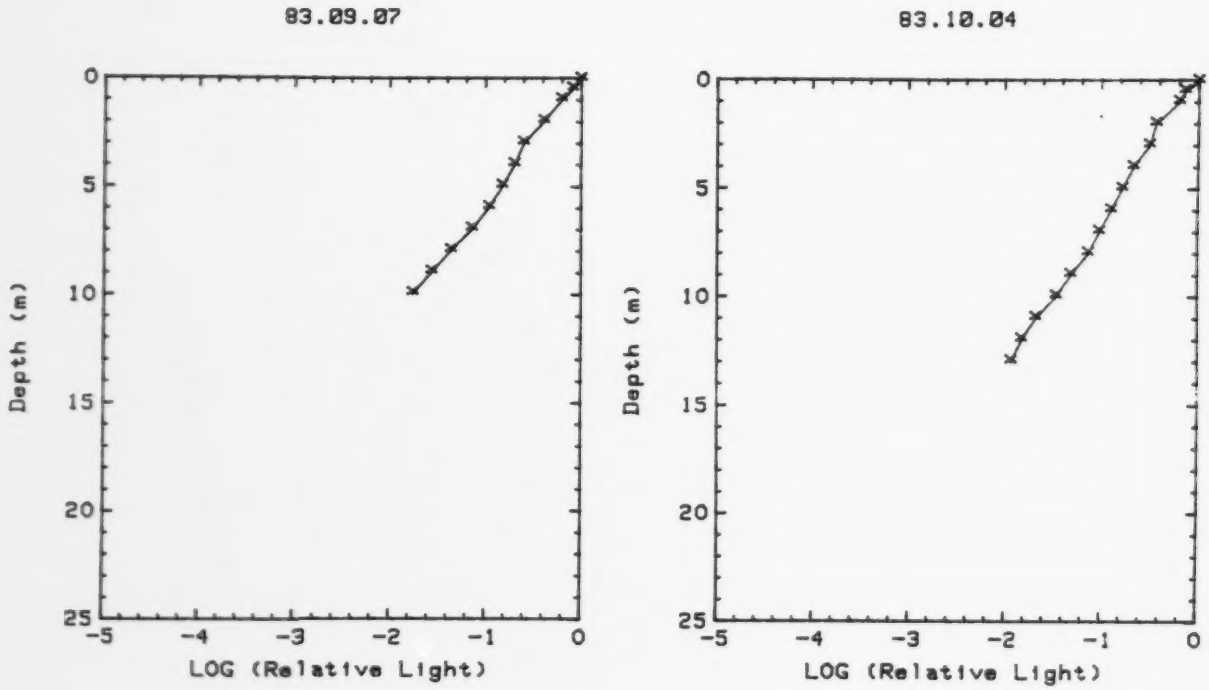


Table 61 Sherborne Lake

# SHERBORNE LAKE

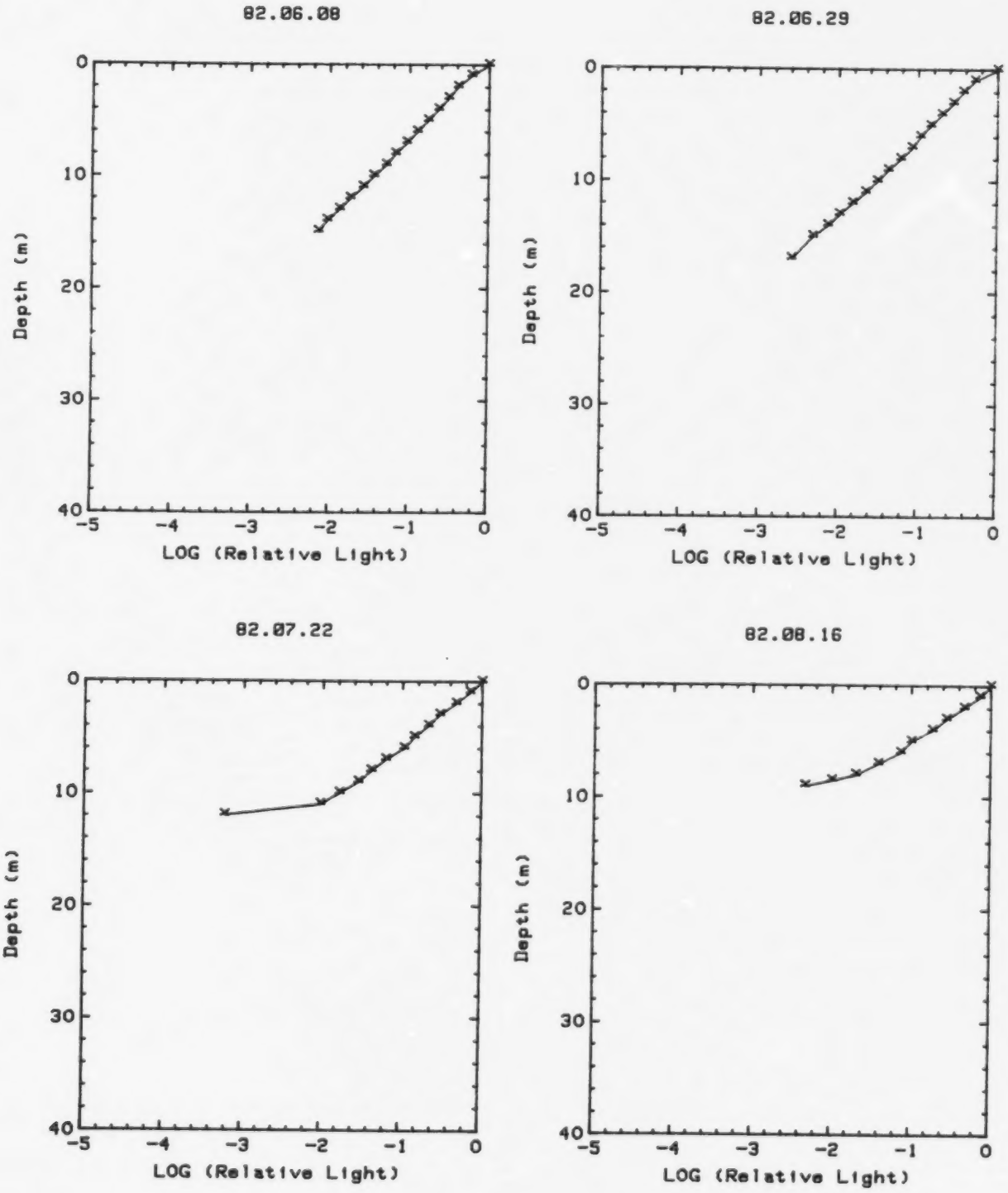


Table 61 con't

# SHERBORNE LAKE

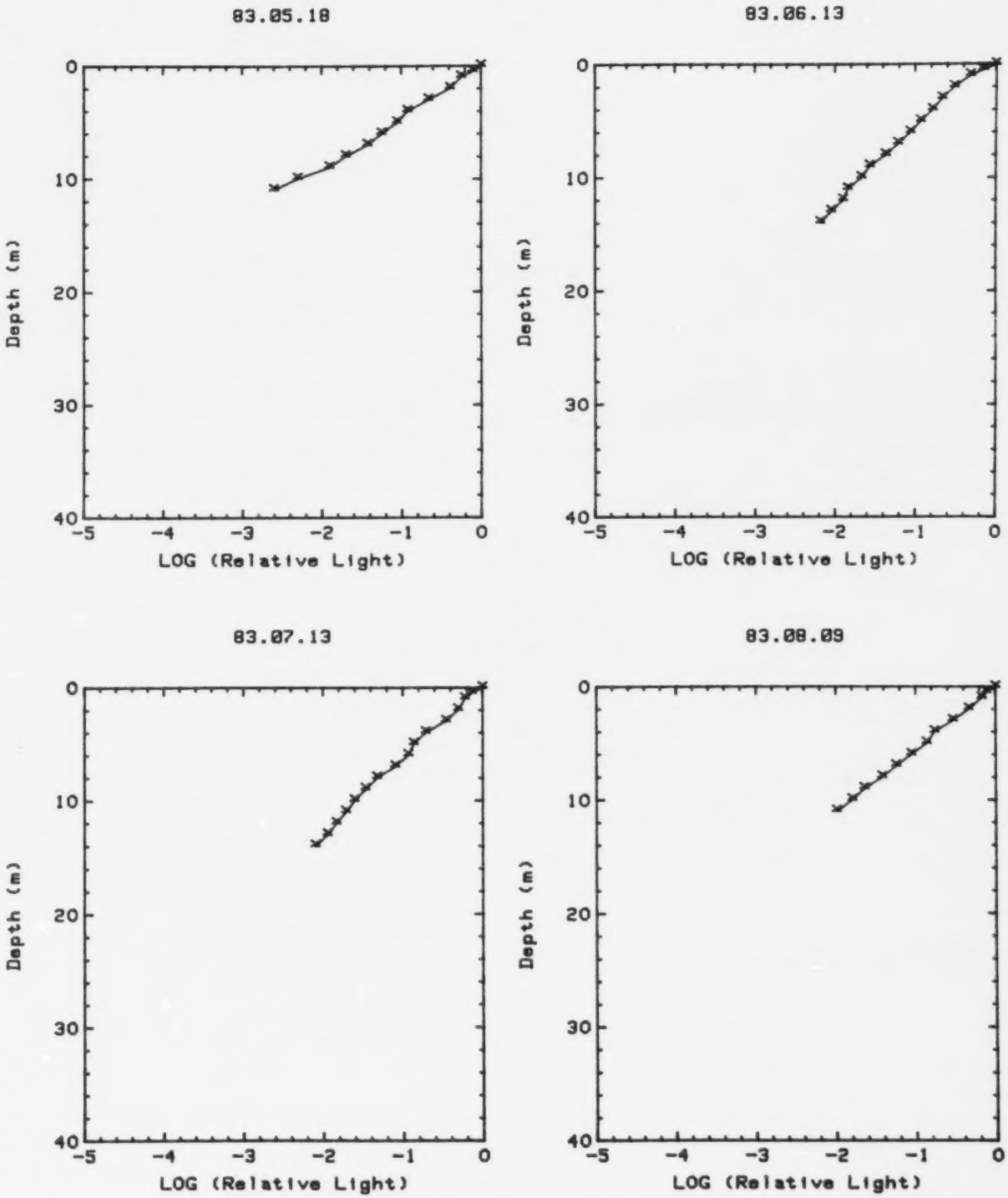


Table 61 con't

# SHERBORNE LAKE

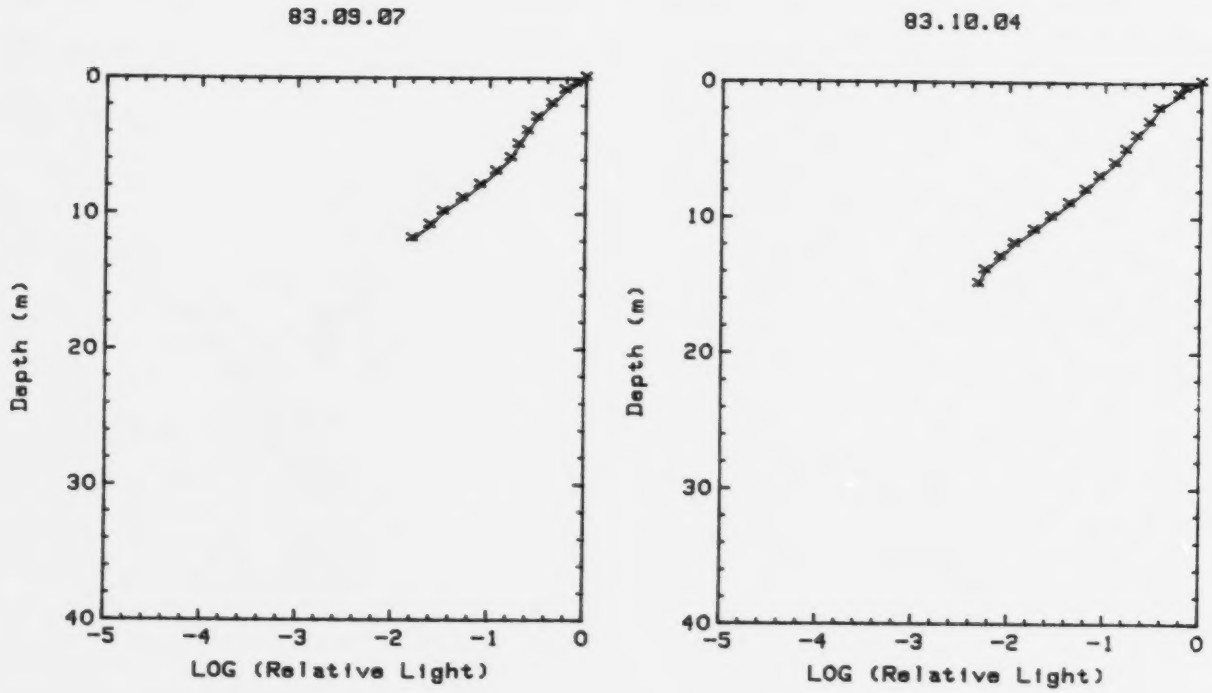
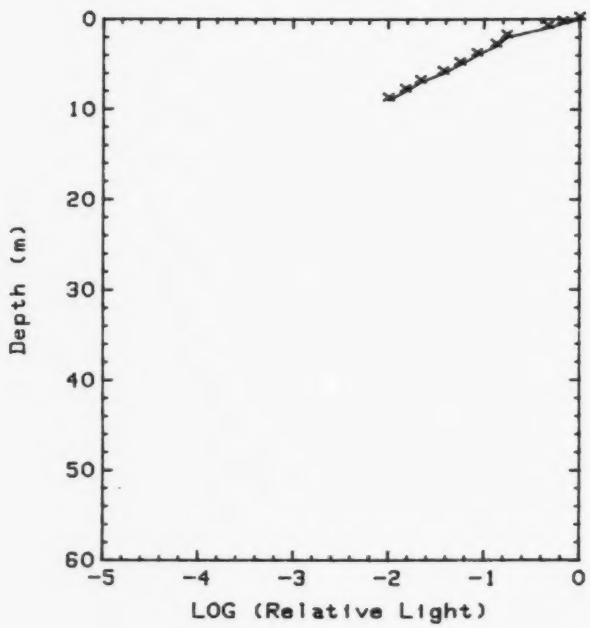


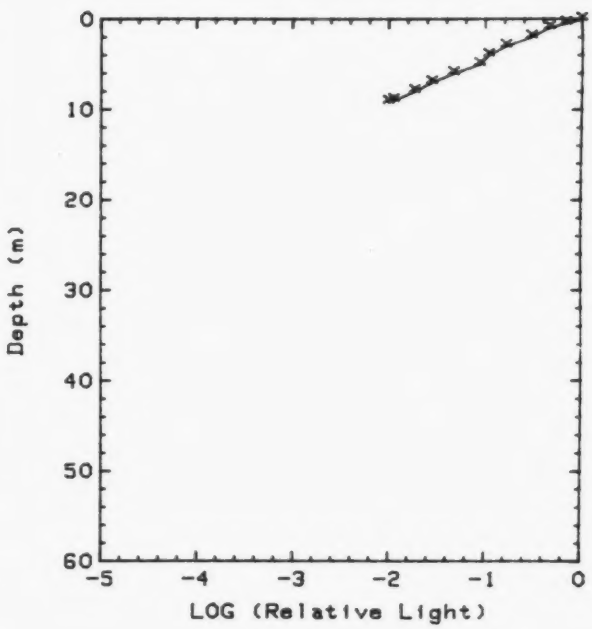
Table 62 Smoke Lake

# SMOKE LAKE

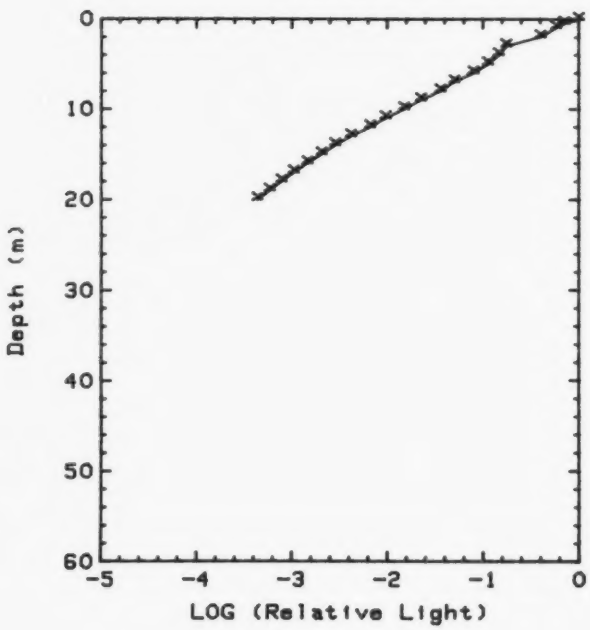
82.05.10




82.06.07




82.07.07




82.08.03

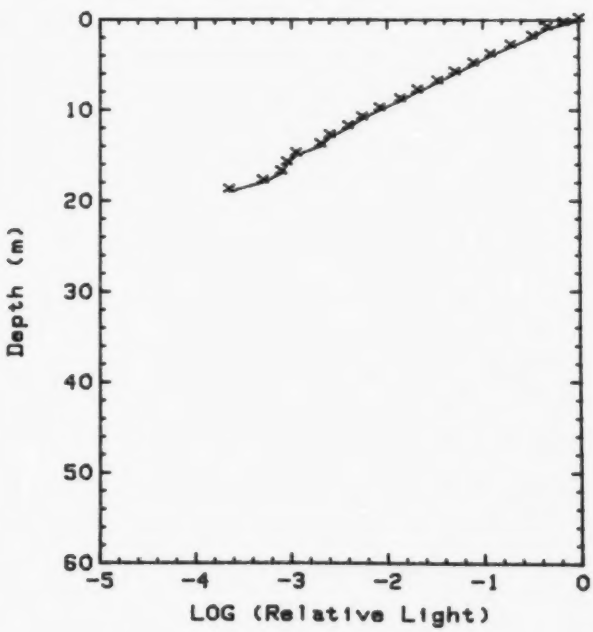
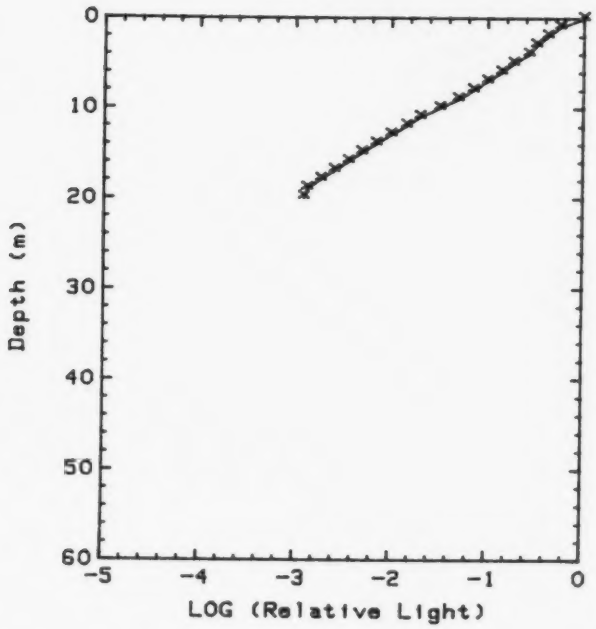


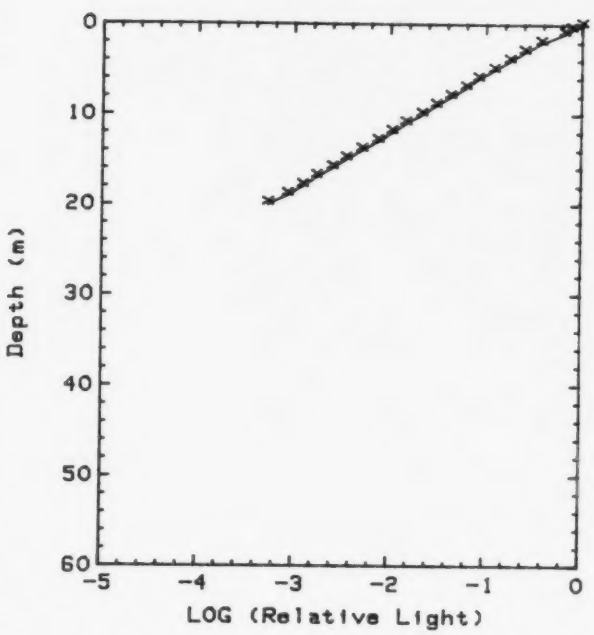
Table 62 con't

# SMOKE LAKE

82.09.01




82.09.28




82.11.15

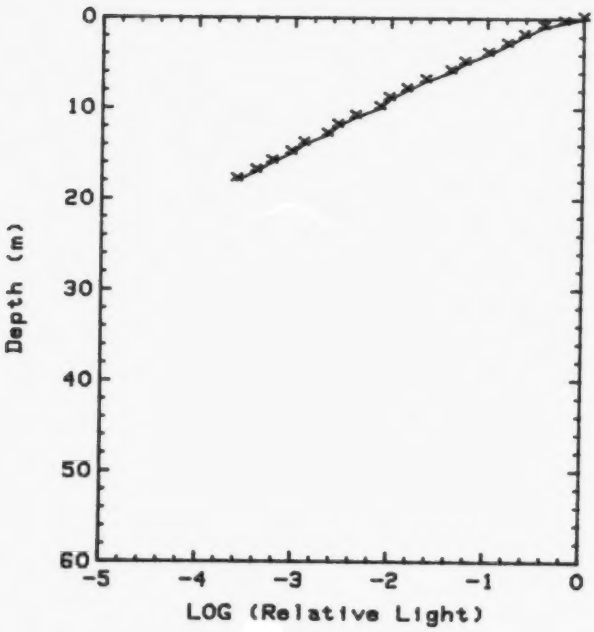
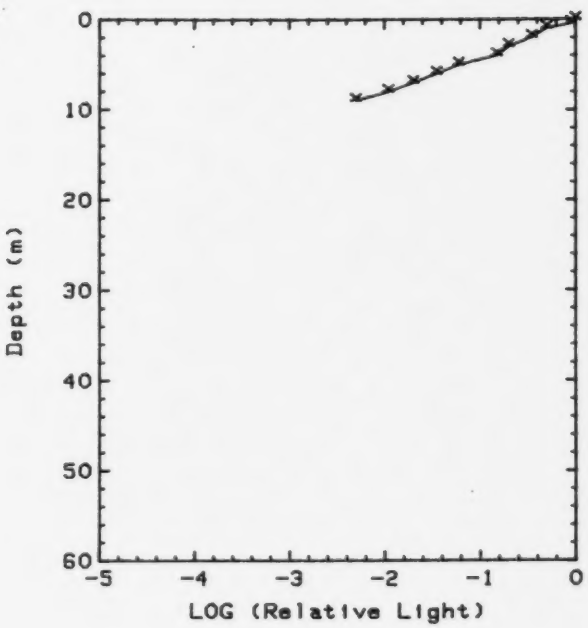


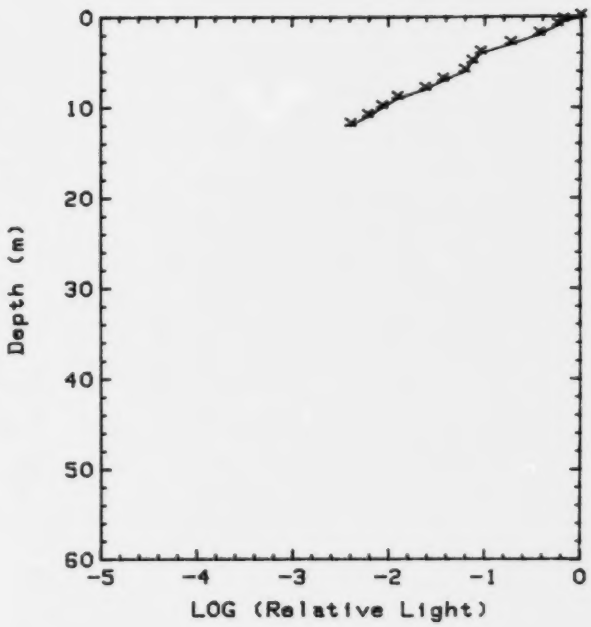
Table 62 con't

# SMOKE LAKE

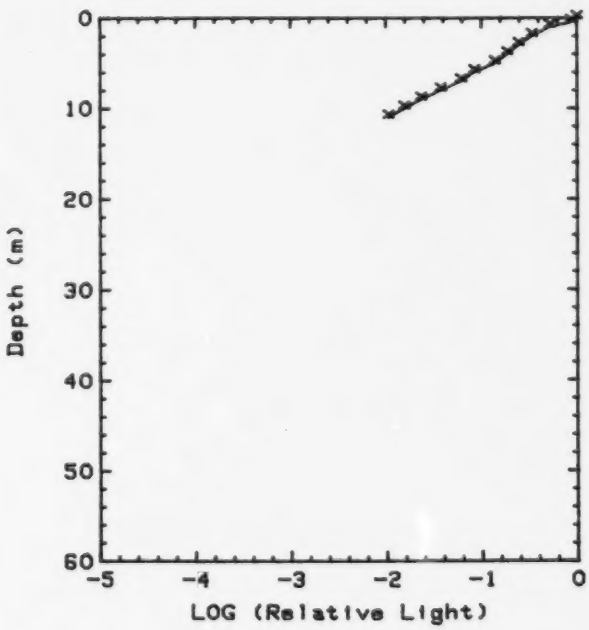
83.05.16




83.06.13




83.07.11




83.09.07

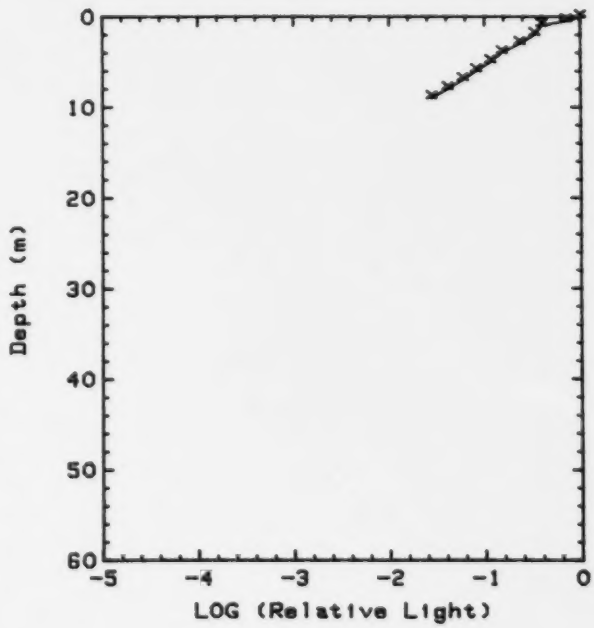


Table 62 con't

# SMOKE LAKE

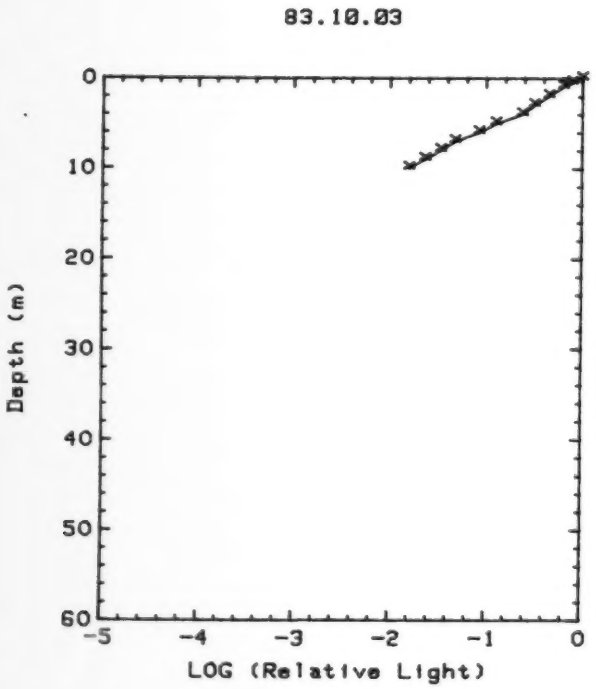
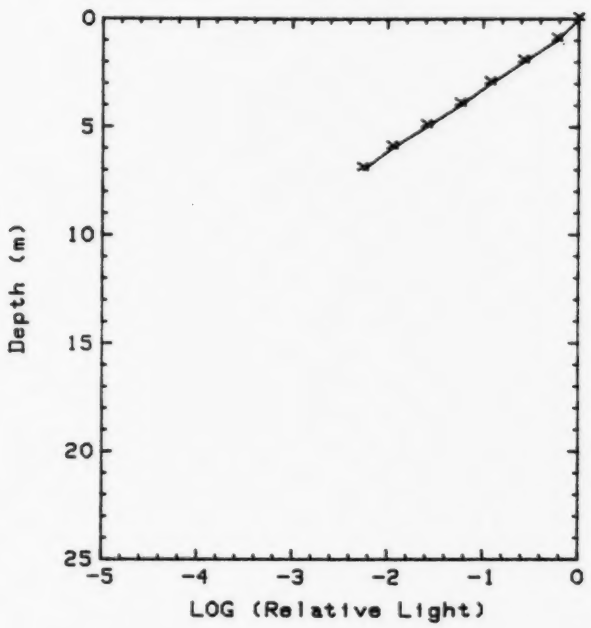


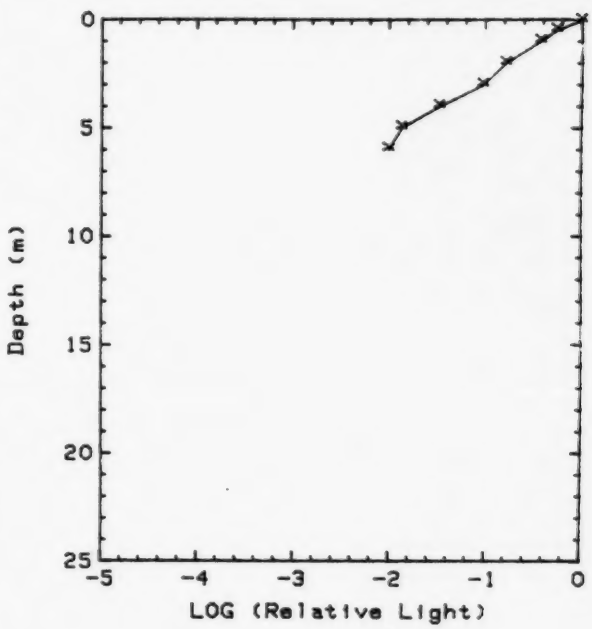
Table 63 Timberwolf Lake

# TIMBERWOLF LAKE

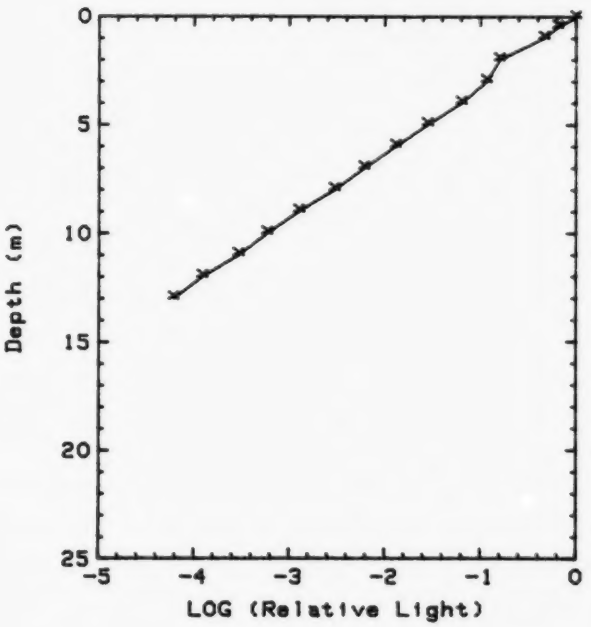
82.05.11




82.06.09




82.07.06




82.08.05

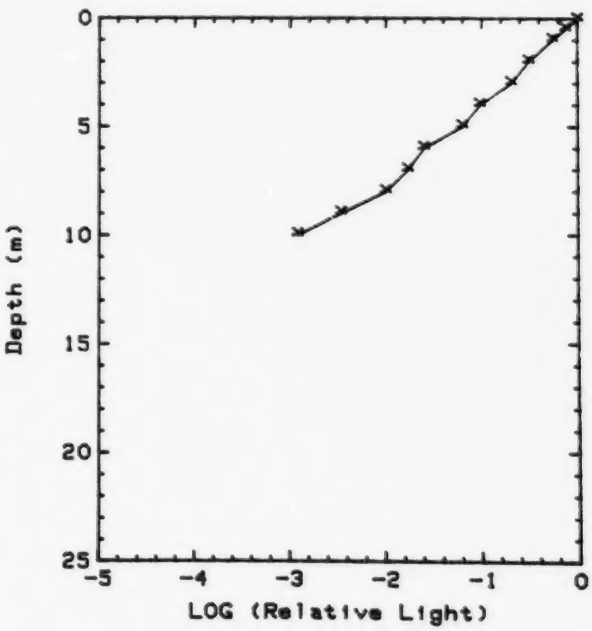
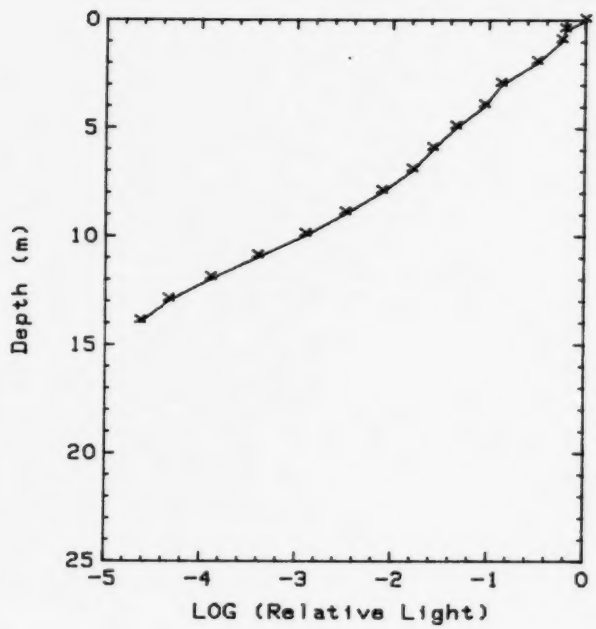


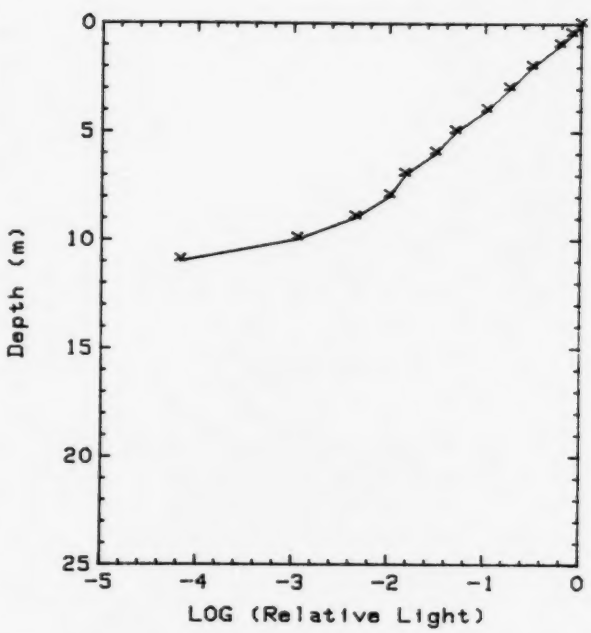
Table 63 con't

# TIMBERWOLF LAKE

82.09.08




82.09.30




82.11.15

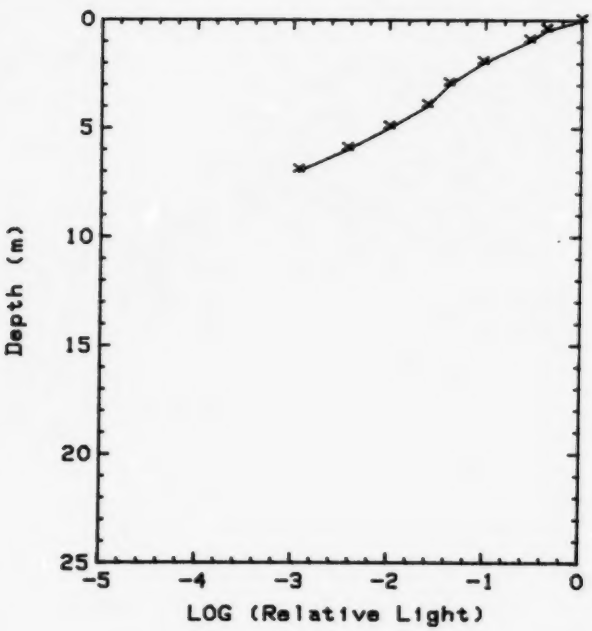
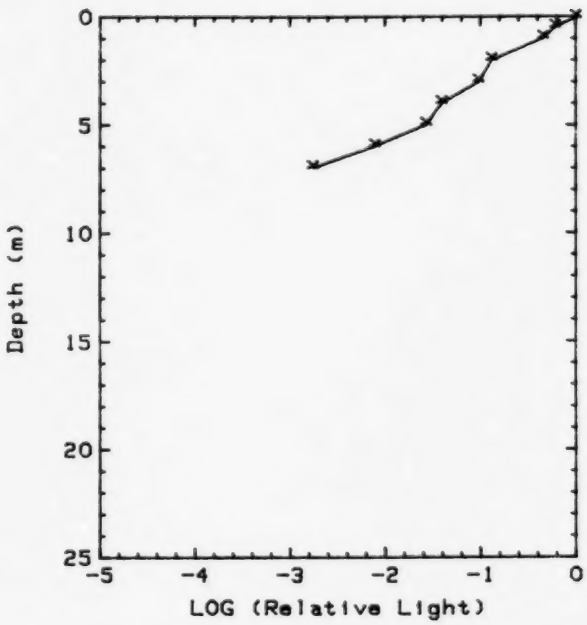


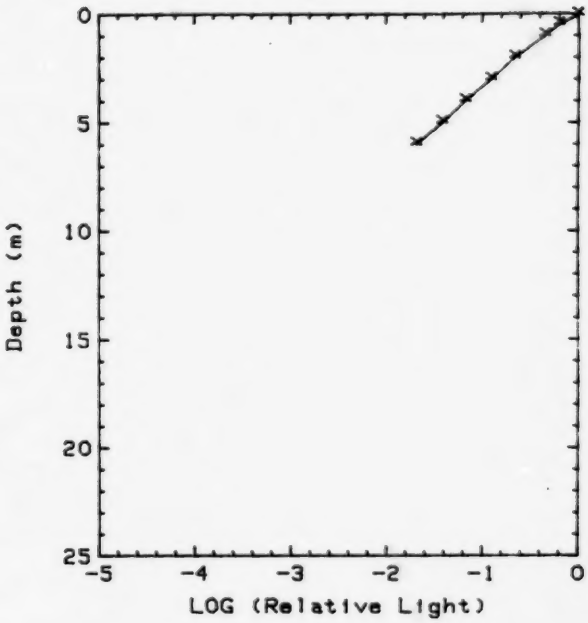
Table 63 con't

# TIMBERWOLF LAKE

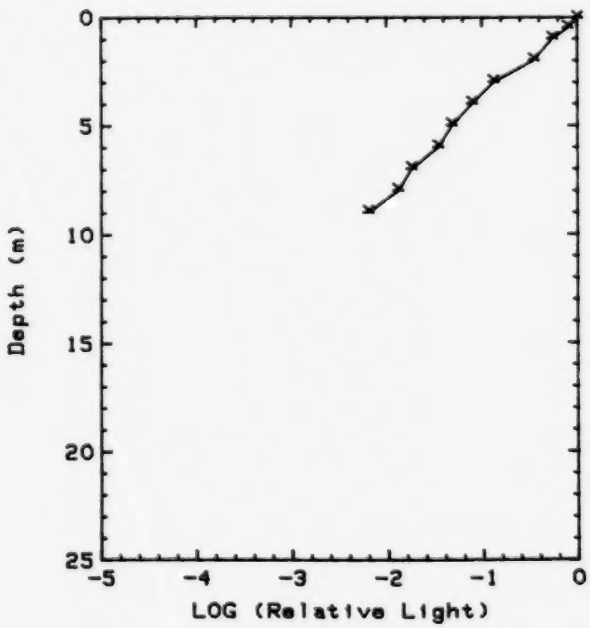
83.05.16




83.06.15




83.07.11




83.08.08

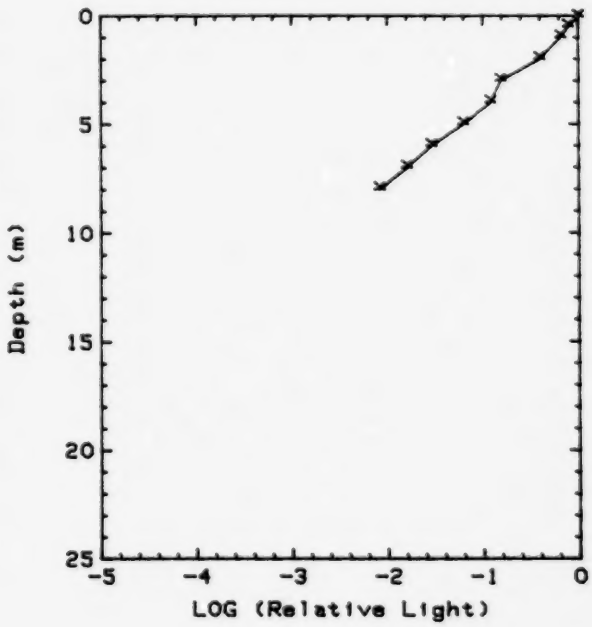


Table 63 con't

# TIMBERWOLF LAKE

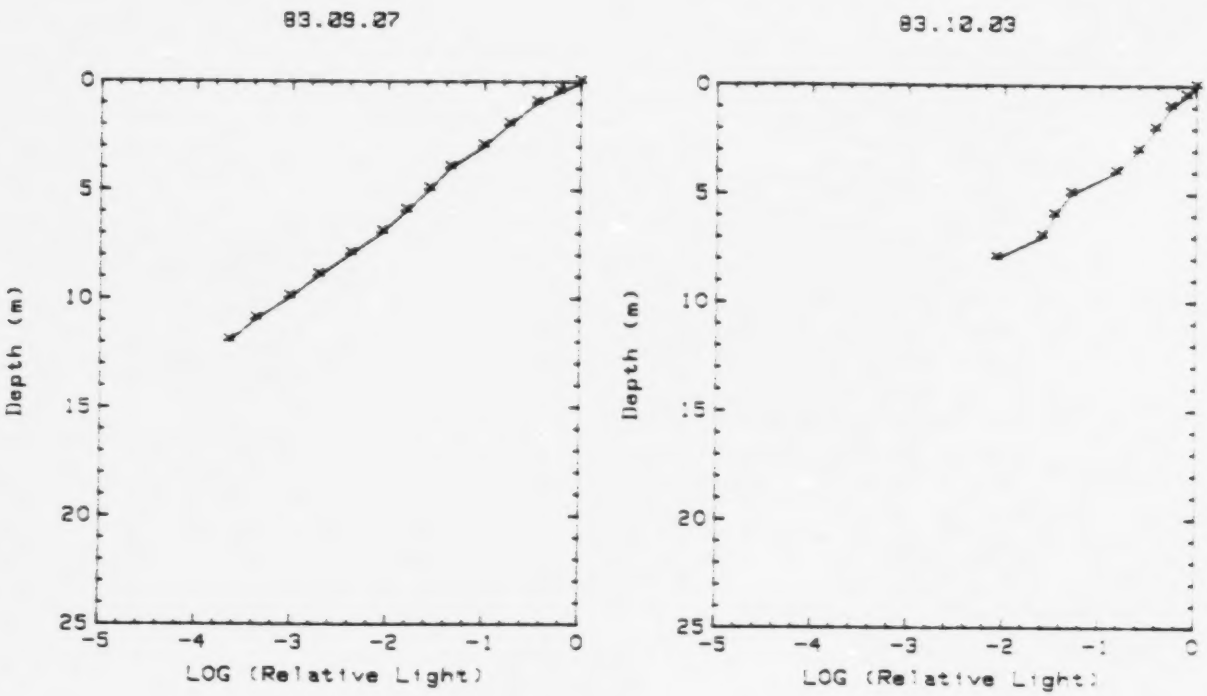
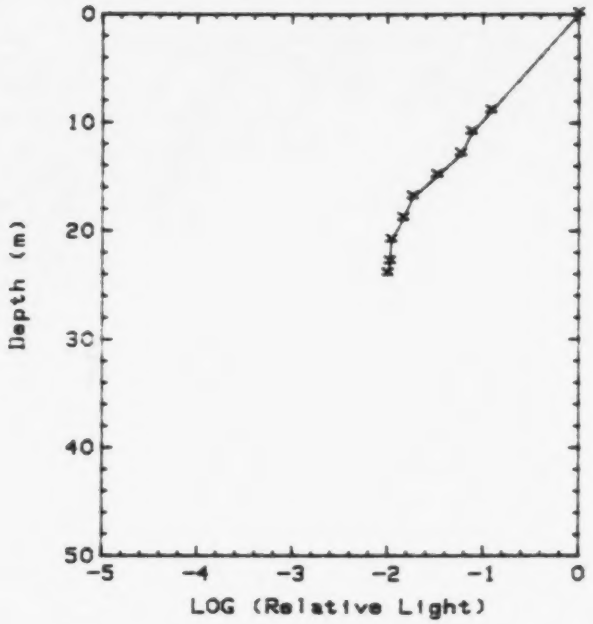


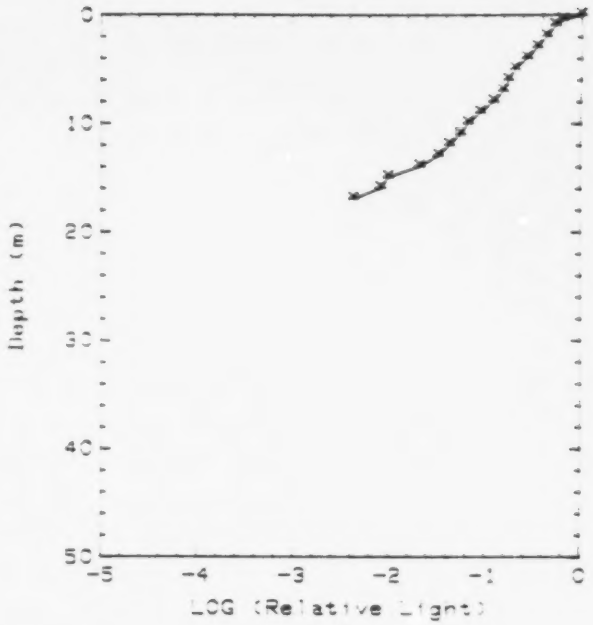
Table 64 Westward Lake

# WESTWARD LAKE

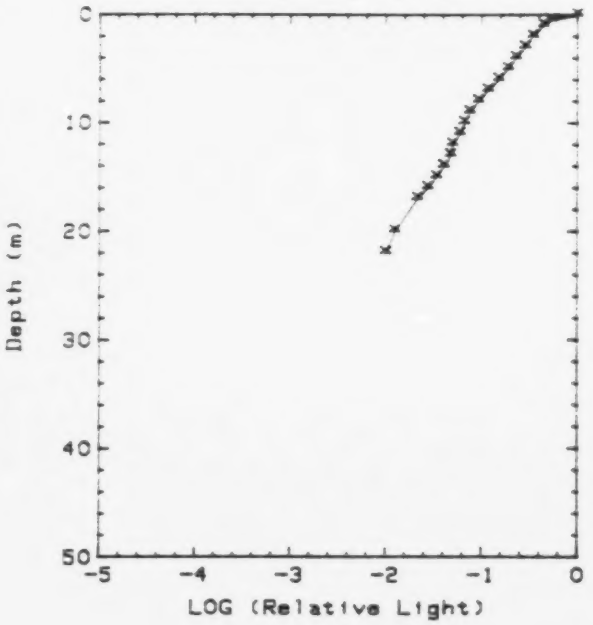
82.05.10




82.06.27




82.07.27




82.08.23

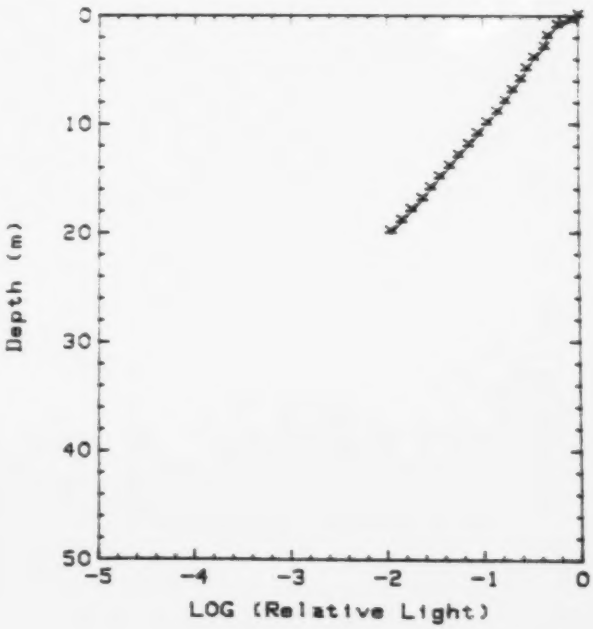
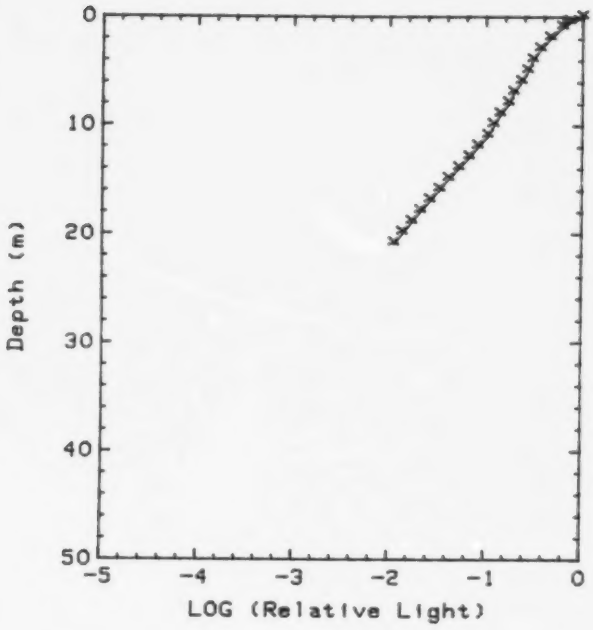


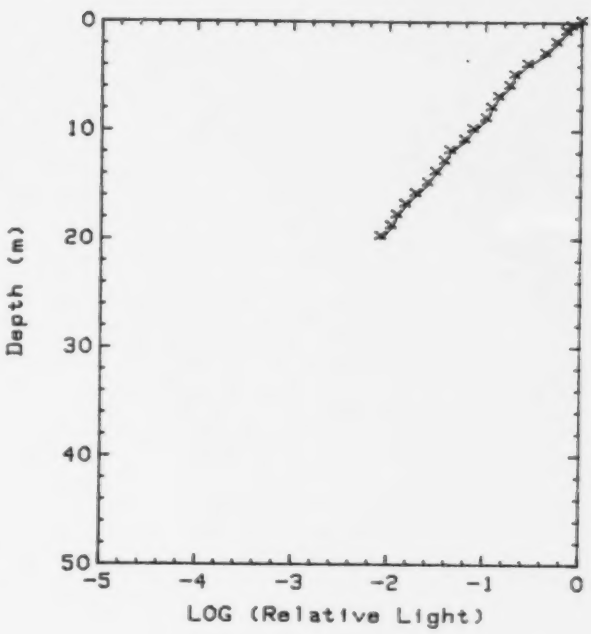
Table 64 con't

# WESTWARD LAKE

82.09.01




82.09.30




82.11.22

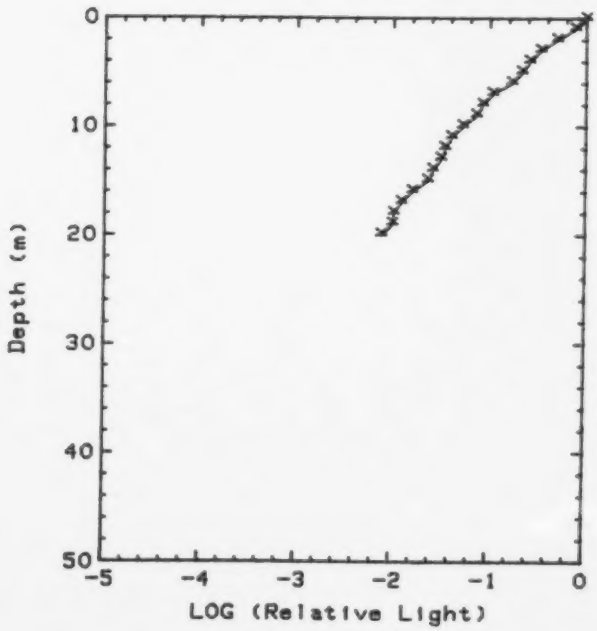
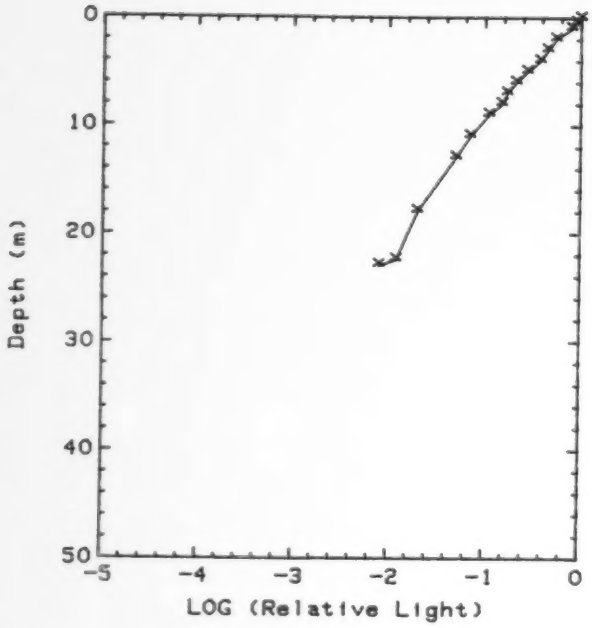


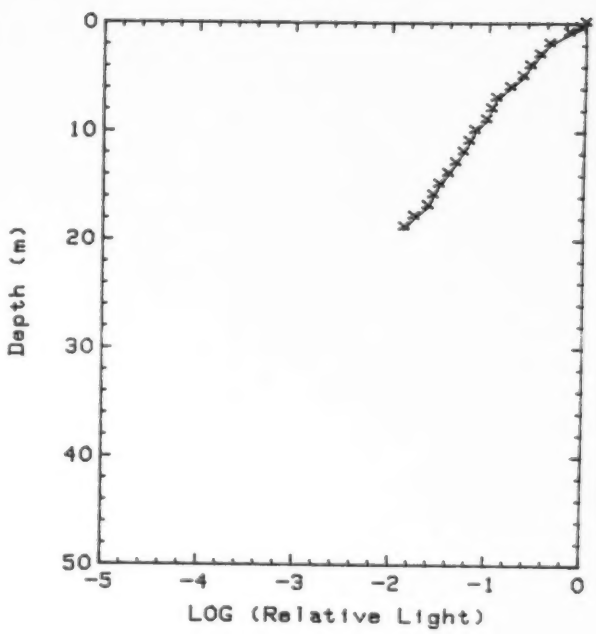
Table 64 con't

# WESTWARD LAKE

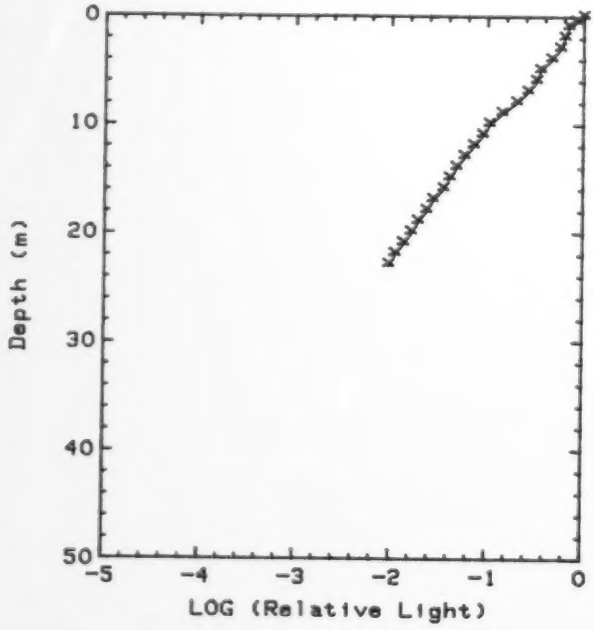
83.05.16




83.06.15




83.07.11




83.08.08

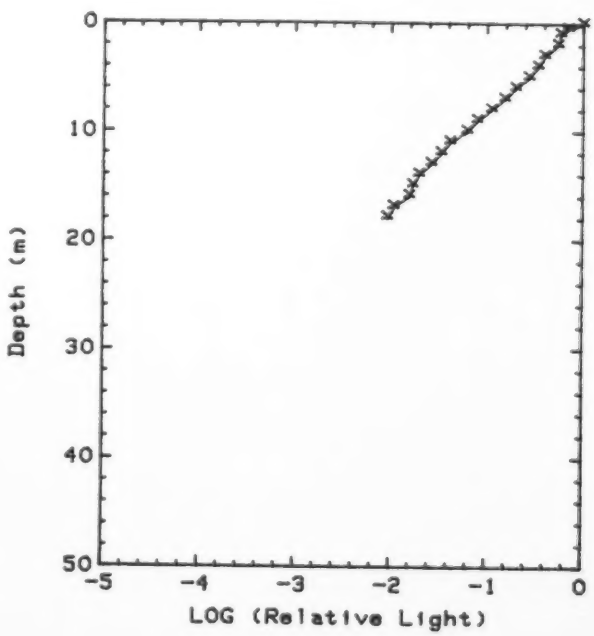
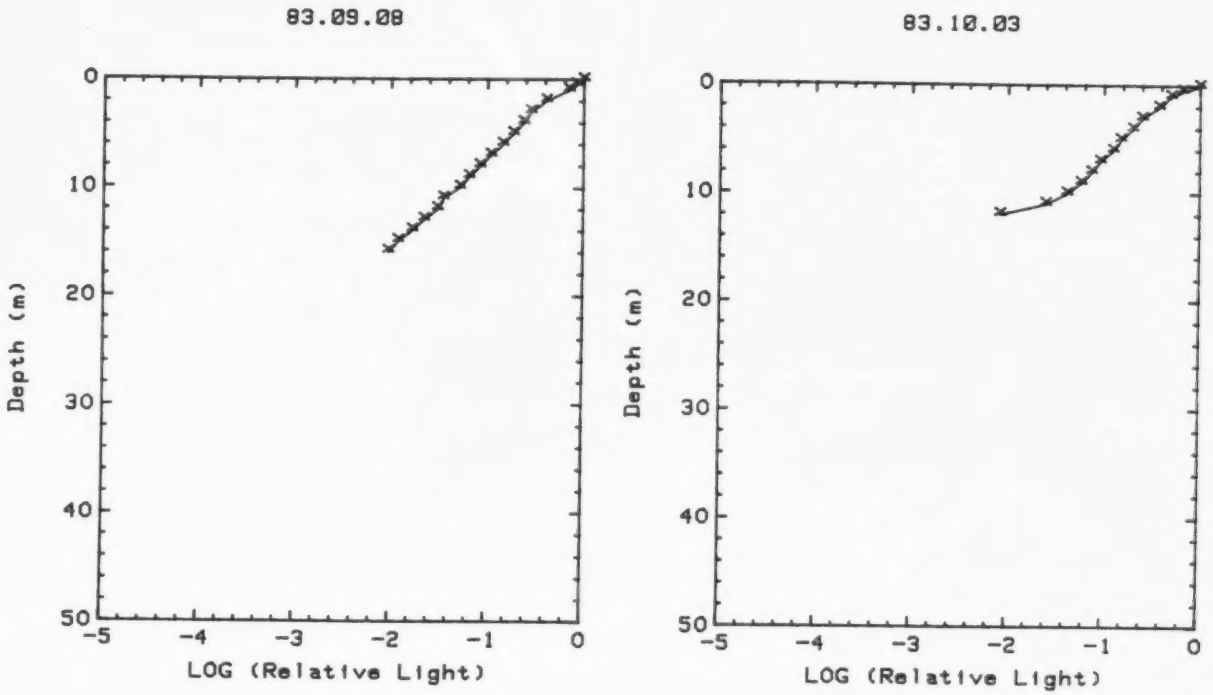


Table 64 con't

# WESTWARD LAKE